



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

NYPL RESEARCH LIBRARIES



3 3433 07594531 5

THE RATIONALE OF FIRE RATES



1

2

3

**THE RATIONALE OF
FIRE RATES**

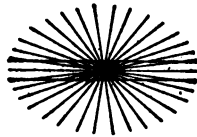


THE RATIONALE OF FIRE RATES

A STUDY OF THE PERSONAL INFLUENCES
AFFECTING FIRE INSURANCE COST

BY

A. F. DEAN



Second Edition

CHICAGO

J. M. MURPHY, PUBLISHER, 928 NEW YORK LIFE BUILDING

1901

E. P. B.

253137

ENTERED ACCORDING TO ACT OF CONGRESS IN THE YEAR
1900, BY

J. M. MURPHY

IN THE OFFICE OF THE LIBRARIAN OF CONGRESS

The Lakeside Press
R. E. DONNELLEY & SONS COMPANY
CHICAGO

“How can I tell how much truth there is underlying a subject unless I know all there is to know about it? As an outsider I can learn nothing; I must be an insider to get at the facts. I cannot deny unless I know as much about the thing denied as those who affirm its truth.”

ELLIOTT COUES



CONTENTS

PART I

REVIEW

	PAGE
SURFACE APPEARANCES, - - - - -	3
THE BONE OF CONTENTION, - - - - -	5
THE INSURANCE COMMUNITY, ITS NATURE AND EXTENT, -	12
THE PARADOXES OF FIRE INSURANCE, - - - - -	21
AN INTERNATIONAL COMPARISON OF LAWS AND LOSS RATIOS,	26
ATTITUDE OF STATE AUTHORITIES TOWARDS FIRE INSURANCE,	29
FIRE UNDERWRITING PROFITS, - - - - -	35
FIRE UNDERWRITING PROFITS COMPARED WITH BANKING	
PROFITS, - - - - -	43
ABOUT RATES, - - - - -	48
THE MYSTERY OF THE INDIVIDUAL RATE, - - - - -	51
CLASSIFICATION, - - - - -	60
THE FIRE RATE AS A TAX, - - - - -	63
THE RATING ASSOCIATION AS A PUBLIC SERVANT, - - -	68
DO RATE-CUTTING AND HIGH COMMISSIONS LOWER RATES?	78
POSSIBILITIES OF A FIRE INSURANCE TRUST, - - - - -	92
INTERSTATE NATURE OF FIRE INSURANCE, - - - - -	100
THE VALUED-POLICY LAW; OR, THE REINCARNATION OF THE	
THUG, - - - - -	103
WHO PAYS THE PIPER? - - - - -	115
THE ANTI-COINSURANCE LAW, - - - - -	119
ANTI-TRUST LAWS AND OPEN COMPETITION, - - - - -	126

1



2





—

100

7

**THE RATIONALE OF
FIRE RATES**

unwholesome influence. No amount of sophistry can expunge or obscure the broad line of demarcation between the good and the evil in this personal equation.

It is a noteworthy coincidence that the fire tax and the duties on imports collected by the national government each aggregate about one hundred and fifty million dollars per annum. There have been few presidential campaigns in which "the tariff question" has not occupied the center of the stage, yet there is no real economic question involved in this tax—no possibility of saving, for the expenses of government must be met, and the money must be raised in one way or another. In all the endless discussion over "tariffs for protection" and "tariffs for revenue only," the sole point of contention has lain in the equable distribution of the burden of taxation.

On the other hand, the fire tax has never been honored with the attention of campaign oratory, editorial "leaders," or cross-roads polemics. When mentioned, people either yawn or concede without argument the claims of interested parties that it is a crying evil imposed upon the people by a remorseless trust. Yet the fire tax is as important as the import tax. It is as heavy a burden on the people; its equable distribution is as essential to fair play, and what is more important, it contains a possible saving of fifty million dollars per annum, more or less.

When the American public is willing to give to the consideration of the fire tax a mere fraction of the time it so enthusiastically devotes to chopping logic over "the tariff question"; when it is disposed to hearken to the voice of experience in preference to the *ex parte* mouthings of inexperience; when it is willing to recognize the

fact that the fire rate is not an inseparable whole, but a thing of parts, some good and some evil; when it is prepared, without fear or favor, to encourage the good and discourage the evil—then, and not before, may it expect the substantial results that have always crowned its efforts when it has applied common sense and common fairness to the solution of its economic problems.



PART I

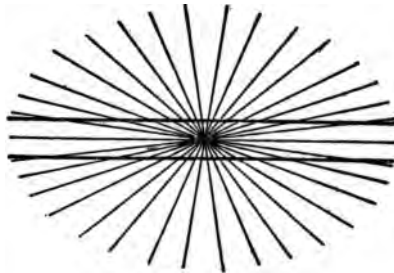
REVIEW

Surface Appearances

"It is not things, but opinions about things, that trouble mankind."

A difference of opinion over the merits of the poet Ronsard led two Frenchmen to fight a duel, in which both were mortally wounded. In their death throes both confessed that they had never read Ronsard.

Men are more apt to come to an agreement than to blows over questions they have conscientiously studied, for knowledge breeds tolerance and a disposition to hear the other side. The knowledge that comes from surface indications, however, is not always to be trusted. Human progress is the slow process of finding out that things are not what they seem. Education reverses the evidence of the senses at every point. The prestidigitator deludes our eyes, and the ventriloquist our ears. The illusion explained is no longer an illusion. In the figure below, the two lines which cross the radiating lines appear to be curved; a straight-edged ruler will prove that they are mathematically straight.



From Adam to Copernicus, all men believed the earth to be the center of the universe, and everybody before Columbus believed it to be flat. People were not to blame for this, because our little globe certainly does appear to be flat, and the sun, moon, and stars wheel around it apparently every twenty-four hours, so that the most casual observer could see for himself that it was the hub of the universe; it was quite natural that sensible people should refuse to entertain the absurd proposition that it was not.

The same superficial appearance of things, which led conservative folk to misdoubt Copernicus and Columbus, causes ninety-nine people out of a hundred to believe, to-day, that all agreements through which uniformity in fire rates is established are a conspiracy in restraint of trade—a thing not to be argued with, but to be sternly repressed by legislation. Has this conviction any solid basis of fact; or is it simply one of the hard-headed popular notions, born of appearances, which have blocked progress in every age; which have incited men to kill each other about Ronsard who had never read Ronsard, and caused them to swear things to be crooked when an ordinary six-inch ruler would have shown them to be perfectly straight?

The Bone of Contention

"Strange all this difference should be
"Twixt Tweedledum and Tweedledee."

The annual fire waste of the United States averages about \$150,000,000. Every ten years the people are called upon to pay a sum equal to the national debt for protection against the fire fiend. It is the duty of fire insurance to assess, collect, and distribute this tax. The task of the tax-gatherer is a thankless one at best, and the apportionment of a tax is one of the most delicate and difficult problems of every government. Our national tariff laws are an important issue in every presidential campaign. Parties are created and swept into oblivion by the see-saw of public opinion over theories of taxation, and every few years Congress enacts a brand-new tariff bill which promises commercial prosperity, but which, as like as not, brings in its wake an era of confusion and disaster. Considering the nature and extent of the fire tax, it is not surprising that it should be the constant subject of unfriendly criticism.

The revenues necessary to make good the national fire waste are obtained through the sale of fire policies by independent and competing corporations to individual purchasers, just as the government sells postage and revenue stamps, with the important difference that one corporation, known as the government, makes and sells stamps, while several hundred corporations make and sell fire policies.

Through this indirect and competitive method of assessment, a thing that is by nature a tax appears under the guise of barter and sale. As we shall see later on, this produces a series of deceptive phenomena in fire insurance; for instead of seeing the thing itself we see its reflected image, which, like the face seen in a mirror, shows the right side as the left side.

This indirect method of assessment makes it necessary to apportion the fire tax either by open competition, through which every competing corporation sells its policies for what they will bring, or by a graded tariff which gauges the hazard and establishes a specific rate for every risk according to its liability to fire damage.

Tariff associations have existed among fire underwriters for many generations, and the fire tariff is the only means yet discovered, or even suggested, for the apportionment of the fire tax by a *system*.

If better that the tax be collected without a system, better that the thing insured be ignored, and the owner allowed to decide for himself what share of the tax he will contribute, then the no-system of open competition should be made compulsory by law.

If, on the other hand, the property itself ought to determine its own rate according to its hazard, regardless of who owns it, then the fire tariff has a right not only to the toleration but to the moral support of the community. If the fire tax is to be apportioned by system instead of by surmise, the fire tariff is as logical a necessity as the Wilson tariff of the Democrats, or the Dingley tariff of the Republicans.

At the threshold of any intelligent consideration of the merits of the tariff system stands the reasonable ques-

tion, In what respect, if any, do the interests of the public and fire insurance coincide—what things do they seek in common?

The most important ends sought through associated effort in fire insurance are:

Economic co-operation in all work that can be satisfactorily done by one for all;

The study and control of inflammable substances and hazardous processes;

The encouragement of effective fire-preventing devices and safe building construction;

The promotion of an intelligent care of property against fire, and the repression of moral hazard arising from indifference or incendiary motives;

The equitable apportionment of the fire tax.

None of these ends is in the slightest degree inimical to the welfare of the community; on the contrary, self-interest prompts the public and the fire underwriting associations to seek precisely the same ends, and the only room for difference of opinion must be with regard to the best way to reach these ends.

Among the numerous associations for more specific purposes, the so-called tariff associations seek to reach all these ends, but in the attempt to assess the fire tax through tariffs, they have come into conflict with a public opinion in many states which demands that the fund necessary to make good the nation's fire waste shall be maintained through open competition.

The bone of contention between the public and rating associations may be stated in a nutshell in the question, Shall the fire tax be apportioned by *chance* or by *system*?

No one would question the necessity for a just appor-

tionment of the tax; the only contention is, which will be more just—open competition, which is chance, or the tariff, which is system? But what is a just apportionment?

There are many charges assessed against the public by other activities, in a manner tacitly admitted to be just, which would not be tolerated for an instant in fire insurance. Waiving all consideration of the numerous misfit governmental tariffs which have been tried and discarded, let us take, for example, the street railways. Every passenger pays five cents a ride; one passenger rides ten miles, another two blocks; one weighs 250 pounds, another 90 pounds; one occupies two seats, another has to hang on to the platform—and altogether, a uniform charge is made for very different accommodations.

In fire insurance, the average cost of carrying all the business of the country year after year is about one dollar for each one hundred dollars of risk assumed by the companies. Under the system employed by the street-cars, fire insurance would realize a small profit in selling its policies at a uniform rate of say \$1.05 for each one hundred dollars of liability assumed, but this would not be satisfactory. The most limited intelligence would at once recognize the broad difference between the hazard of a furniture factory and the hazard of a brick dwelling. It is necessary to find some logical relation between the basis rate of the furniture-factory class and that of the dwelling class, for these properties belong to distinct groups, with widely different hazards. There are innumerable distinctions of this kind between property classes, and these distinctions apply to each class as a whole, for

they are the result of fundamental differences in industrial processes or occupancy.

Again, taking two furniture factories, one may be simply an aggregation of kiln-dried lumber, shavings, paints, varnishes, and inflammable oils, confined within four wooden walls, around a roaring furnace; another may be built of brick, with its boiler-house and dangerous processes confined in separate brick buildings, and with every modern device to prevent fires. It would not do to charge these two furniture factories the same average rate of \$1.05, for to do so would be to rob one for the benefit of the other.

These distinctions exist not only between the hazards of classes, but between individual risks of the same class; and if every risk were charged a uniform rate of \$1.05, regardless of its hazard, as the street railways charge their passengers five cents each, regardless of avoidupois, cubical contents, or distance carried, it would not be a just or intelligent distribution of the fire tax.

The united underwriting experience of the world has evolved a system of scale measurement of distinctions in fire hazard through tariffs, and experience has shown that these tariffs, to be reliable, must be based upon actual statistical averages, founded upon time, space, and numbers. There can be but one average derived from actual experience—but one result for the class or the specific risk; and this fact makes uniformity inevitable.

Without in the least suspecting the fact, the public and fire-rating associations agree in the fundamental theorem, *Like rates to like hazards*; for this theorem appeals to universal intelligence.

Two neighbors owning like property may, each on his own account, endeavor to get the lowest obtainable rate, but if one learns that the other has secured a lower rate than himself, he will instinctively insist that he is entitled to the same treatment as his neighbor. If a man owns two buildings identical in structure, exposure, and occupancy, he does not need any one to tell him that he ought to secure the same rate for both—he reaches this conclusion intuitively *because they are alike*. In other words, the theorem, *Like rates to like hazards*, like the mathematical axiom, *Like causes produce like effects*, is a self-evident truth, and its converse, *Unlike rates to unlike hazards*, is as demonstrable as the mathematical corollary, *Unlike causes produce unlike effects*.

If all hazards were alike, the problem of the fire rate would be very simple, but unfortunately nearly all hazards are unlike, and it is the duty of fire insurance to measure the degrees of unlikeness. What constitutes this unlikeness or difference in hazard is the function of rating associations to analyze, measure, weigh, and value; and in making the like rates for like hazards, and unlike rates for unlike hazards, instinctively demanded by universal intelligence, fire insurance must not guess or surmise, or let other people guess or surmise for it, but on the contrary, must measure the degree of unlikeness by a logical system based upon experience, else the business of fire insurance becomes altogether a game of chance.

The fire tariff is the time-honored instrumentality through which rating associations have sought to do this. This tariff shows each man his rate, just as a looking-glass shows him his face. The rate shown by the tariff is a resultant of the laws of average, just as his face, seen in

a mirror, is a resultant of the laws of optics. In this unavoidable uniformity or fixity of rate there is a superficial resemblance to the artificial and purely arbitrary prices established by monopolies. People who judge everything by surface indications see many independent fire insurance companies charging the same rate for the same risk. They reason that when a number of competing corporations charge the same price for the same thing, it is self-evidently a conspiracy in restraint of trade; in other words, a trust. As with the optical illusion in the preceding chapter, a thing appears to be crooked when it is mathematically straight; and without the slightest effort to learn the truth, tariffs and rating associations are declared unlawful under severe penalties.

This is the situation to-day in many states of the Union. Experience and Inexperience are trying to reach the same end, but Inexperience insists that both shall leave the beaten road and take to the woods.

The Insurance Community, Its Nature and Extent

"Division of labor cannot be carried far where there are but few to divide the labor among. . . . Sundry developed forms of activity, both predatory and peaceful, are made practicable by the power which large masses of men furnish. . . . With increasing specialization of functions comes increasing inability in each part to perform the functions of other parts."

The natural law, that every cause produces more than one effect, is illustrated in an interesting way by the original cause which made fire insurance a necessity. This cause has created a world-wide industry from which numerous collateral and co-operating activities have sprung.

In the United States these allied activities constitute a great industrial group—a sort of republic within a republic.

It is estimated that there are about five hundred thousand people in the United States dependent upon the industry of insurance. This community has laws, usages, a public sentiment, and a literature of its own. It supports about seventy-five trade publications; and of all this community probably not one in a thousand owns a dollar of stock in an insurance company. This great industrial body is constantly putting forth new limbs to perform specific functions, necessitated by the growing complexity of the industry. It already has a bewildering variety of these appendages, among which we find:

National and sectional associations of stock-company officials for the discussion of underwriting ethics; maintenance of statistical experience, dissemination of information, etc. ;

Sectional associations for the discussion of underwriting theory and practice;

National and sectional associations for the promotion of uniform rules of practice;

State associations of field men ;

National associations of local agents ;

State associations of local agents ;

Local associations of agents ;

National and state associations of mutuals ;

Adjusting bureaus ;

Inspection associations for improved risks ;

Inspection associations for unimproved risks ;

Associations for writing sprinkled risks ;

Associations for writing railroad risks ;

Associations for the exchange of reinsurance ;

Salvage corps for the protection of property during fires ;

Salvage associations for handling property damaged by fires ;

National and state associations of experts in fire-preventing devices ;

National fire-protection association ;

Bureaus of fire-protection engineering ;

Electrical bureaus ;

Map-publishing associations ;

Associations for the purpose of inspecting and publishing rate estimates ;

Manufacturers of insurance supplies ;

The insurance press ;

Publishers of detailed information about fires ;

Manufacturers of fire-preventing devices, fire engines, sprinklers, automatic alarms, etc. ;

Adjusters for the assured ;

Local fire departments ;

National associations of fire departments ;

State associations of fire departments ;

National associations of fire chiefs ;

Attorneys for the assured;
 Attorneys for the companies;
 State and local protection associations among policy holders;
 State insurance departments;
 National association of insurance commissioners;
 National conference of state and company officials;
 Corporate surety companies, organized for the purpose of
 furnishing bonds required of fire companies by some states;
 Associations for the purpose of buying up and wrecking fire
 companies, either by liquidation or reinsurance (a new thing).*

Here are forty-three distinct functions generated by the original cause—without mentioning the fire companies themselves—all more or less interdependent and necessary to the intelligent and economical transaction of fire insurance.

These co-ordinate activities are an outgrowth of the social necessities of the industry as a whole. The unit of the industry is the fire company, a complex structure itself, animated and directed by the human instincts of its personnel; an organism with distinct individual appetite, habits, and preferences, which must needs elbow its way through the world to success or failure as best it can.

Fire insurance companies are of three varieties, stock, mutual, and Lloyds; some transact business in a single city or state, some in every state of the Union; some are native, and some foreign—hailing from nearly every civ-

* Among the subjects investigated by the bureaus of electricity and fire protection engineering alone, we find the following:

Electricity with relation to fires;
 Inflammables and explosives, their storage, handling, sale, manipulation, and use;
 Lighting, heating, motive power, and manufacturing processes;
 Fire-resisting paints, coatings, and fire-proofing;
 Building construction in every detail;
 Devices for detecting, preventing, retarding, or extinguishing fires, including water-works systems, water mains, hose, hydrants, fire departments, salvage corps, carbonic-acid extinguishers, chemical tanks, thermo-electric fire alarms, fire doors and shutters, elevator and hatchway floor stops, light-wells and other vertical hazards, automatic hatchway and door closers, wire glass, prism and glazed plate glass, fire pumps, blower systems for ventilating, heating, and conveying, automatic sprinkler heads, piping and capacity of pipes, regulators, cut-offs, automatic valves, and water meters.

ilized part of the world; some pay their taxes and conform to the laws of the states and the usages of the industry; some do business surreptitiously, and in defiance of all laws, statutory and ethical; some are conducted on the broad and stable basis of experience and the law of averages; some as gambling institutions, on the uncertain law of chance; some work in harmonious co-operation for uniformity of practice, and the conservation of property and life; some, like Ishmael, with a hand against every man, as the common enemy of society and their kind; some have millions of solid assets and a long and unblemished record for honorable dealing; some have no record, no tangible assets, and no ascertainable habitation.

These company organisms, such as they are, good, bad, and indifferent, law-abiding and law-breaking, real and mythical, marshal their clans in every state of the Union in the strife of a competition that ranges from honorable industrial rivalry to bloodthirsty high-binders. Each of these organisms is the rallying point for a retinue of presidents, secretaries, general agents, state agents, special agents, inspectors, adjusters, examiners, clerks, local agents, solicitors, and brokers, who collectively make up the personnel, the flesh-and-blood element, of the industry.

This personnel is to the organized industry of fire insurance what the abstraction known as the public is to the organism known as the government; and it is an industrial public in which the clash of contending opinions and conflicting interests is as constant and irreconcilable as the strife of the political arena. Popular sentiment with the insurance public is as potent as it is with the

public of the outside world. Now and then an individual may for a brief time mold or control this sentiment, but only statesmanlike ability can mold or control it for long. The most obscure local agent may start a disturbance that will be felt from one end of the country to the other; the most prominent president or department manager may be as helpless in the sweep of united opinion as a chip in a flood. Altogether, the personnel constitutes a community as large as say St. Louis or Boston—a community with its full share of evil influences and pervers; but unlike those cities, it has no jails, asylums, courts, or police to repress its fools and knaves.

In the active manifestation of fire insurance with relation to the public, this personal element is as distinct from the company itself as the swarm is different from the beehive. The company is simply a chartered right, an inert abstraction, around which the activity swarms; and it is necessary to consider the company and the personnel as separate and distinct quantities, for the latter is not only a distinct but a constantly changing quantity. An official of one company this week may be an official of another company next week. The agent who represents a long list of companies this year may represent another and entirely different list next year.

Pursuing the analysis further, we find a broad dividing line in the interests and motives of the personnel, caused by the methods of compensation.

The officials and employees of a company are compensated by salary, and while they may and frequently do change employers, their interests while employed are identical with the interests of the organism they serve. On the other hand, agents and brokers are compensated

by a commission consisting of an agreed percentage on the premiums received for the risks they may secure. This commission entails no personal liability on the part of the agent or broker, whose responsibility ends when the monthly balance has been collected and remitted to the company.

As there is a distinction between the salaried officials and employees on one hand and the agents and brokers who work for a commission on the other hand, so there is another distinction between agents and brokers. The agent is the intermediary who secures business for his companies for a consideration known as commission. An agent may represent an indefinite number of companies, in some cases fifty, in many cases twenty to thirty. These companies come and go in his agency, about as transient guests at a hotel, in search of satisfactory quarters and treatment. On the other hand, the broker is an independent dealer, who works for a consideration known as a brokerage, a middleman who negotiates with property owners, and when he has secured the control of their risks, places the insurance wherever he can secure the most favorable terms. As a rule, brokers are found only in large cities, but a broker residing in Chicago may negotiate through correspondence with property owners in any part of the country; and when he has secured the business, if he cannot place it satisfactorily in his own city, he may place it through correspondence with companies or agents in New York, San Francisco, or even London. The world is the broker's oyster.

In soliciting patronage, it will be seen that, in commercial parlance, company officials secure business by cultivating agents, agents secure business by cultivating

brokers, and brokers by cultivating the public. It may be said that in not one risk in a thousand does the company or its salaried officials come into contact with the public in the procurement of business.

In small towns the emoluments of agency work will not furnish a living income, and the work is taken up as a side issue by attorneys, justices of the peace, merchants, bankers, teachers, doctors, ministers, etc. In fact, agents are found in almost every vocation; and taking them as they run, they compare in morals, manners, and social standing with the average of their community.

In the background is a silent, shifting multitude of stockholders, who furnish the solid basis of cash on which the business is transacted,—people who know nothing about insurance or insurance laws, who put their money into insurance stocks simply as an investment, who keep it there while the investment pays, and when it does not pay, promptly dispose of their holdings. These stockholders embrace every class of the community—merchants, mechanics, professional men, clerks, widows, orphans, and to a small extent capitalists; but as a rule, fire insurance stocks are held by people of small means. The business is too uncertain for people to venture large amounts. "Nothing is more timorous than a million dollars—except two million dollars." The capitalist is chary of fire stocks, for he can keep his money more safely and profitably employed. Very few of the great fortunes of the country consist even in the smallest part of fire insurance stocks, and the fire insurance plutocrat is a myth.

The stockholder is interested only in the annual statement of the company, just as he is interested in the

annual statement of a bank or railroad in which he may hold stock. If this statement is unfavorable, he sells his stock and invests his money elsewhere. The stockholder is often a policy holder as well, and his dominant motive that of a policy holder. He is not infrequently as prejudiced against and as loud in his denunciation of fire rates as other people.

In the practical workings of the business, the stockholder is simply one of the ciphers which stand to the right of the digit that denotes the cash capital of the company—a cipher that is easily sponged out by adversity or inimical legislation.

Under the lens of analysis the activity of fire insurance resolves itself into a personal industry, which under the stock plan is based upon cash capital; under the mutual plan, upon a sort of *carte blanche* credit, with time and amount left blank, and under the Lloyds plan has usually been found by its unfortunate patrons to be based upon a “gold brick.”

People patronize the lawyer or doctor because of faith in his ability; they patronize the insurance agent because of faith in his stability, as shown by the financial exhibit of his companies, which simply represents the foundation on which this faith rests, just as the reputation of the doctor or lawyer is the foundation of our faith in him.

The company empowers its agents to write contracts known as policies; it does not authorize them to make verbal contracts. Its responsibility begins with its acceptance of this written contract, and ends with its fulfillment or expiration; and outside of this written contract the industry, so far as its relations with the public are concerned, is the industry of local agents.

While more or less disturbed by legislation, local agents must adapt themselves to the inevitable, and deal in the sort of indemnity demanded by popular tastes. If capital were driven out of fire insurance, several hundred thousand agents would, after more or less travail, learn in time to transact their business without capital; for fire insurance is a public necessity which must be supplied, be the quality what it may.

Taken as a whole, considered objectively and subjectively, under its various forms of transacting business, with its collateral activities, its hosts of inert stockholders, and its greater hosts of active retainers, divided by conflicting opinions and clashing interests, and torn by internal dissensions, like the greater public of which it is a part, fire insurance constitutes the most complex industrial outgrowth of modern civilization. This vast organism, uncomprehended by its own, and incomprehensible to others, that in its resistless evolution baffles human foresight, is, and must ever be, the antithesis of monopoly. It is embodied strife—competition. As an organism it transcends the control of its personnel. It can never be harnessed with an agreement in restraint of trade, because all experience shows that it cannot be harnessed with an agreement in restraint of itself.

The Paradoxes of Fire Insurance

"For if she will, she will, you may depend on't,
And if she won't, she won't; so there's an end on't."

Fire insurance, with good show of reason, might be claimed to stand for the feminine principle in the business world. It has been poetically termed "the handmaid of commerce," and it certainly exercises the privileges of the sex in its calm indifference to logical sequences and its determination to have its own way, in spite of rhyme or reason. In any event, it has a way of circumventing statutory laws that is perplexing to people who do not believe it worth while to study the idiosyncrasies which negative so much of the legislation enacted for its control.

Laws intended to cure the evils of over-insurance prove to be a hotbed for the bacterial culture of fire-bugs. Laws intended to foster competition and reduce rates restrain competition and increase rates. Laws intended to tax the companies tax the policy holders instead. Laws intended to enforce fair treatment in the assessment of the fire rate cause the general public to contribute to the fire tax of the great corporations and trusts; in fine, nearly every law seems to have worked by contraries.

It would perhaps be unjust to censure legislators for these undeniable facts, for "the handmaid of commerce" shows an equal determination to have her own way in spite of the rules laid down from time to time by practical underwriters for her moral and spiritual guidance.

The American people are addicted to the habit of taking and prescribing "ready relief" pills for social as well as physical maladies, real and imaginary, and underwriters themselves are not free from this national vice of over-medication. Fire insurance has had more than its share of legislative dosing, and the failure of the patient to respond to treatment arises largely from the fact that its numerous doctors have not deemed it worth while to inquire whether it is male, female, or neuter, or whether its troubles are physical or moral. It does not require an exhaustive study of comparative anatomy to discover the structural differences between the Handmaid and her lord and master, Commerce.

The merchant or manufacturer knows beforehand the cost of the article he sells; the insurance company does not. In fact, the transaction which seems to be a sale of indemnity is not a sale, but a contract to buy a given thing at its cash value *in futuro*. The actual sale is made by the assured to the company after the fire. The policy holder is the real vendor, and the company the vendee. The company, in consideration of an agreed deposit known as the premium, gives a personal bond to purchase destroyed values in the event of a fire. The merchant ascertains the cost of the articles sold before the sale, through his personal and local experience; the insurance company obtains the information through which it determines the cost of the indemnity it sells, not from its individual experience, but from the experience of many companies in many states through many years. The merchant's or manufacturer's cost is a concrete pre-established fact; the insurance company's cost is an abstraction derived from the laws of average.

The ordinary relations between seller and buyer are changed in fire insurance by the intermediation of an agent who, from the nature of the business, is an agent only in name.

It is incumbent upon the agent to provide protection for the entire property of his patrons—as the line of every company is limited he must represent many companies to do this. These companies to him are simply so many reservoirs from which he sells indemnity in quantities desired, just as a grocer sells molasses out of a barrel.

The states require that all printed policies be uniform and all companies solvent, hence the patron seldom expresses any choice among companies, leaving the selection to the agent. In the practical negotiation of insurance contracts the company is no more a party than the barrel of molasses in the sale made by the grocer.

The local agent is simply a dealer in indemnity who selects the risk for the company, and the company for the risk. He makes every representation to the assured that induces him to select the company, and every representation to the company that induces it to accept the risk. The only part taken by the company is to approve the agent's transaction, and this approval is always based upon the agent's written or oral representation of the facts. Its authority is simply restrictive—it can decline, or state the conditions under which it will assume the risk. The company's role is passive until a loss occurs, when, under the terms of his appointment, the agent's authority ceases. The loss is the dividing line where the agent's functions stop and the company's functions begin. Up to this dividing line, the responsibility for every act

and word not set forth in the written policy is personal with agents.*

Again, in fire insurance the ordinary laws of supply and demand do not exist. The premium received for each policy is presumed, by the laws of the several states, to be sufficient to maintain the legal reserve and so long as this reserve is maintained there is no limit to the possible sale of indemnity while paper and ink hold out.

The company receives premiums just as a bank receives deposits, with the difference that this deposit is not refunded to the individual, but is disbursed "to whom it may concern" in making good future fire damages. The company's policies are in their nature similar to the certificates of deposit issued by a bank, and there can be no more limit to the issuance of policies than there can be to the issuance of certificates of deposit.

The available supply of fire indemnity is exhaustless, and can never be cornered or controlled through trusts, pools, compacts, or agreements. There is but one way to limit or reduce this supply, and that is to make its sale unprofitable. If nine-tenths of the companies should retire, the remaining tenth would continue to receive premiums and issue policies; the only result would be that the increase in income would reduce the ratio of fixed expense, and enable the remaining companies to supply indemnity cheaper than before.

Take it all in all, fire insurance, like the oarsman who rows his boat ahead while he looks astern, must approach

*Some of the state associations of agents, and many local boards, have adopted resolutions to the effect that "the business on the books of a company, placed there by a local agent, belongs to the agent, and not to the company, and that the company, if it change agents, shall not solicit the renewal of the business on the books." This is a virtual admission by agents that the industry is theirs, and that each company is simply a basis of credit upon which the agent transacts business.

most of the problems of its existence "wrong end to." Excepting the poet, who called it "the handmaid of commerce," no one seems to be able to define it. Congress ignores it except when it needs revenue; the supreme court says it is not commerce; the state courts and legislatures call it a commodity or utility, as best suits their convenience; the public regards it as a suspect; the politicians treat it as a crime; and underwriters are willing to admit that it is a conundrum. Altogether, it is a crux—"a thing that vexes, tries, and puzzles in the highest degree," because of the unsuspected fact that it is an unlicensed tax-gatherer, permitted to transact business as a licensed peddler.

An International Comparison of Laws and Loss Ratios

"Gentlemen: You pays your money an' you takes your choice."

It is in the power of the constituted authorities to abolish fire insurance; but it is not within their power to compel the sale of indemnity at less than cost. Laws cannot lower *rates*, but may do much to lower *cost*. Once lower the cost, and competition will lower rates.

A comparison of existing laws and the average loss on each one hundred dollars of fire insurance in different parts of the world shows that—

In France the loss on each \$100 is about.....	\$0.06
In Great Britain the loss on each \$100 is about.....	.09
In New York the loss on each \$100 is about.....	.58
In Massachusetts the loss on each \$100 is about.....	.60
In Texas the loss on each \$100 is about.....	1.10
In Arkansas the loss on each \$100 is about.....	1.31

The average loss in Arkansas and Texas is about twice as high as in New York and Massachusetts, thirteen times as high as in Great Britain, and twenty times as high as in France.

The official statistics show that for the eighteen years ending January 1, 1898, the net underwriting profit or loss for each dollar of premiums received by the companies in the states named has been as follows :

Comparison of Laws and Loss Ratios 27

	Net Loss.	Net Profit.
In New York.....	.....	\$0.05
In Massachusetts. ....	.....	.03
In Texas.	\$0.02	.....
In Arkansas. ....	.01	.....

While the average underwriting profits of England and France are not obtainable for comparison, the business of those countries is free from the wide fluctuations in loss ratio which have made it so hazardous in this country, and underwriting profits have been small but uniform, at rates which seem amazingly low from an American standpoint.

In France, where the cost is lowest, the Code Napoleon provides that every person is personally liable for any loss, damage, or injury caused by his own carelessness or negligence. Under this law, the presumption is that every fire is caused by the act or neglect of the tenant, and the burden of proof rests with him to show that the fire originated from a defect in the building, or from some cause beyond his control. In the absence of such proof, the tenant is responsible to his landlord and neighbor. If the fire originated from defect in the building, the landlord is held responsible to the tenant, and to the owners of adjoining property.

In Great Britain there are practically no laws regarding insurance; the companies are treated the same as ordinary commercial corporations.

In New York and Massachusetts the laws are few and liberal in spirit.

In Texas and Arkansas, seemingly, every law that ingenuity could devise to hamper and harass the industry has been enacted.

To sum up the comparison :

The lowest cost is found where a rigid personal responsibility is attached to the insured ;

The next lowest, where the industry has not been hampered by exacting laws ;

The highest cost prevails where every effort has been made to impede the industry, relieve the policy holder from personal responsibility, and enable him to profit by a fire.

The business has been profitable where rates are low, and unprofitable where rates are high.

The lowest and most equitable rates are found where tariff associations have been free from legislative interference.

Attitude of the State Authorities Toward Fire Insurance

"I do not love thee, Sabidius. nor can I say why; this only I can say, I do not love thee."

Insurance is the only prominent industry exclusively under the control of the individual states of the Union. When the national constitution was ratified, the states surrendered to the national government the control of inter-state commerce. The supreme court subsequently declared that insurance was not commerce, which left it under the control of the several states; hence it may be said that there is no United States for insurance.

All laws regarding the industry are to be found in the statute books of the several states, and as the laws of no two agree, there are at the present time forty-nine insurance codes in force in the several states and territories of the Union. These laws are in a state of constant flux. The politician with an ax to grind, the man with a fancied grievance against fire insurance, the property owner with a concealed intent to secure a personal advantage in his rate assessment, the busybody underwriter intent on forcing his legislative nostrums upon his associates, and devout people generally, who are in the habit of taking "all their little wants and cares" to the throne of grace located at the state capital, are one and all ready to offer up petitions to the all controlling wisdom of their state legislature for the better regulation of "the hand-

maid of commerce." The member for their district obligingly cobbles their crude ideas into a bill, and under the unwritten rule of comity, "You vote for my measure and I will vote for yours," the bill is enacted into statutory law, without investigation, or the slightest idea of its ultimate consequences.

Every session of every state legislature is reasonably certain to change or add to existing laws. Every change necessitates a readaptation to the new conditions on the part of the companies, and entails an increase in the average expense of the industry as a whole.

The body of existing insurance laws in many states is so bulky, complicated, and self-contradictory as to be beyond human comprehension, and this confusion is worse confounded by the fact that although insurance is not recognized as commerce, it is frequently held to a strained construction of some general law not found in the insurance code. In addition to the laws themselves, there is, in many states, an indefinite personal authority conferred upon the state insurance superintendent, which empowers him, at his discretion, to inflict the death penalty upon a company, so far as his state is concerned, by withholding its certificate of authority to transact business. In this way, unlimited judicial and executive powers are vested in an official who is changed at every gubernatorial election, and who, in many cases, receives his official appointment as a reward for political services, without the slightest reference to his knowledge of the industry over which he holds plenary powers.

Under the rulings of state superintendents, in some states the companies are practically deprived of access to the courts, and subjected to the dictum of an executive

official who interprets existing laws to suit himself, and who, in the absence of statutory law, not infrequently manufactures his own law.

In some states the insurance department has become an acknowledged strategic position in state politics. The incumbent rarely holds office more than one term, and each successor is fired with the ambition to make a record over his predecessor in the way of ingenious and far-fetched rulings. During recent years, the attorney-general's office seems to have become a rival of the insurance department in searching out "the nice sharp quilllets of the law" with similar ends in view.

The relations between fire insurance and the states are still further complicated by the right of examination vested in state superintendents. The original purpose of state insurance departments was to ensure solvent indemnity to policy holders through supervision of the financial standing of fire insurance companies. In the beginning, state auditors performed this work in connection with their supervision of banking institutions, and in some states the supervision of fire insurance still remains with the auditor's office. Most of the states now maintain an insurance department, the functions of which have slowly expanded from a mere supervision of the financial status of insurance companies, into an indefinite authority, which in many states is limited only by the superintendent's own claims. Among the older and more prominent states, there is a tacit understanding that the examination and certification of the superintendent of each state as to the financial standing of the companies of his own state shall be accepted by other state departments.

This rule is a wise one, for one examination, if thor-

ough, is as good as a hundred, and if every company were subjected to an annual examination by every state, there would be no time left for the transaction of business. But unfortunately, in several states the insurance superintendents reserve the right to examine insurance companies of other states at discretion, and these examinations have developed features of extortion so outrageous as to become, in some states, a political scandal, which has had an important influence in state elections.

Companies of questionable standing have been ignored, and the thumb-screw applied to institutions of world-wide reputation, which had transacted business for generations without question as to their solvency or integrity. The so-called examiners sent around for the purpose of conducting official examinations have, in many cases, been entirely without experience in actuarial work—men who at any other calling would be well paid at sixty dollars a month. But the companies were charged for the services of these men twenty-five dollars per diem, with hotel bills and railway fares. Where several companies were examined in one city, full railway fares to and from some distant state were charged to each company examined. In some instances, these examiners, after spending two or three hours in thumbing over a company's books, have presented a bill for several hundred dollars for an official examination, which the company **was** obliged to pay or forfeit its right to do business in the state. One examiner made a tour of the Eastern cities with his wife and infant child. The companies were charged five dollars per diem for the services of the wife, though it may be said, in extenuation, that no charge was made for the services of the baby.

The full extent of the exactions made under the guise of examination fees has never been revealed, for the reason that no company could afford to jeopardize its right to transact business in a state by making complaint.

All things considered, it is not an extravagant statement to say that fire insurance, for which there is no United States, is equally outside the pale of state laws; for between the voluminousness and obscurity of the laws of many states, and the vague and indefinite authority conferred upon state superintendents, these laws are liable to be interpreted to suit the whims of each succeeding official.

It is proper to say that in most cases this despotic power has been wielded with wisdom and moderation, but the unending change of officials and laws leaves the companies in a state of constant uncertainty and apprehension.

Outside of the regular taxes and fees required by every state, a material increase in the average expense ratio of the business is caused by the necessity of complying with the requirements of new laws, and by the official examinations and other exactions of new state officials.

It is a surprising fact, which few people would credit, that the several states through taxes and fees enjoy a large and constant income from the transaction of fire insurance, by the simple process of taking all the profits while the companies are permitted to take all the risks. That this is true is proven by the official compilations for the twelve years ending January 1, 1900. The figures show that during this period the companies paid in state taxes \$35,970,437, while their underwriting loss, after paying losses and expenses, was \$7,820,489. During this time the stockholders assumed a total liability of over two

hundred and fifty billion dollars, on which their net underwriting profit during even the most favorable years has seldom averaged over 50 cents for each \$1,000 at risk. Meanwhile the stockholders stood to lose millions of cash assets with every clang of the fire-bell.

In many states fire insurance has been practically reduced to a tax-gathering machine, with a hopper into which the people dump their premiums and a spout which pours all the toll into the coffers of the state.

Notwithstanding this limited copartnership to which the states contribute neither capital nor financial liability, and from which they enjoy the entire usufruct, the authorities in some states miss no opportunity to confirm public opinion in the belief that fire insurance is a remorseless trust, which, but for their patriotic efforts, would grind extortionate profits out of the people. This contention, invariably loudest in states where profits have been least, is reminiscent:

The Head, Tongue, Eyes, and Limbs once charged the Belly with being an idle, inactive consumer—a useless gulf which demanded their constant labor to keep full. The defendant's rejoinder, as recorded by Shakespeare, was as follows:

"True it is, my incorporate friends,
That I receive the general food at first,
Which you do live upon; and fit it is;
Because I am the storehouse and the shop
Of the whole body. But if you do remember,
I send it through the rivers of your blood,
Even to the court, the heart,—to the seat o' the brain;
And through the cranks and offices of man,
The strongest nerves, and small inferior veins,
From me receive that natural competency
Whereby they live. Though all at once cannot
See what I deliver out to each:
Yet I can make my audit up, and all
From me do back receive the *flour* of all
And leave me but the *bran*. What say you to this?"

Fire Underwriting Profits

"A mountain was in labor, sending forth dreadful groans, and there was in the region the highest expectation. After all, it brought forth a small mouse."

Each of the several states of the Union requires an annual statement from every company transacting business within its borders. These statements must show in detail the assets and liabilities, as well as the profits or losses, on the preceding year's business. Not only must the capital stock of a company be maintained intact, but as a guaranty of good faith, it must, in addition, maintain a cash reserve sufficient to enable it to refund to its policy holders the unearned premium on their policies. The law further requires that its assets be invested in approved securities. These assets, usually consisting of bonds and stocks, continue to earn interest or dividends, while they stand as a pledge to policy holders; meanwhile, the company is at liberty to sell its policies at its own risk. Each company has thus two distinct sources of income, which have no connection with each other: 1. What the company's own money earns; 2. Profits, if any, from the sale of its policies.

Some companies are successful as financiers and unsuccessful as underwriters, some just the reverse; some succeed in both respects, some in neither; some are speculators with their assets, some speculate in underwriting.

These managerial idiosyncrasies all contribute to the aggregate results shown by the statistics of the industry.

Nature moves in cycles. The cannibalism which appears among most of the lower orders of life reappears in the complex organism known as the fire insurance company. When one of these organisms, unable to adapt itself to its environments, is about to give up the ghost, its fellow-beings stand ready to devour it for the nutriment in its unearned premiums. Some of these corporate man-eaters have notably increased their girth on this sort of diet; others have overtaxed their digestive organs, and become in turn food for their fellow-anthropophagi. In the statistics of the business the largest underwriting profits as well as the largest losses are found opposite the names of the companies that have a penchant for feeding upon the unwholesome diet afforded by the remains of their defunct competitors.

Speculation in fire underwriting consists largely in "reinsurance deals" through which one company accepts the unearned premiums of another company, and assumes its outstanding liabilities. It is hardly necessary to add that transactions of this sort have no connection with legitimate fire underwriting, though the statements of one or two of these cannibalistic concerns are frequently quoted to show the inordinate profits of fire insurance, while nothing is said of the disastrous experience of those who have succumbed to their unnatural appetites.

The total premiums received each year, less expenses and disbursements for fire losses, constitute what is known as "Profit on underwriting." This is the only source of income in which the public is concerned, because it shows the actual profits of each company on its

sales of indemnity, from which it is easy to determine whether rates are too high or too low.

What the company's own money earns does not concern the public, because it is neither more nor less than the same money would earn if the stockholders should by common consent divide up their assets and quit the business, or individually sell their stock and invest the proceeds in securities which are always for sale in the financial centers of the country.

The official figures show that all companies doing business in the United States during the ten years ending January 1, 1900, made an average underwriting profit of about one-third of a cent out of each dollar of premiums received; in other words, that in the grand aggregate, fire indemnity has been sold to the American people for the past ten years at cost. The percentage named is the average annual underwriting profit on the total amount of fire indemnity sold each year, but the official statements of the companies show dividends as percentages, not of the amount of indemnity sold, but of the capital stock of each company, and it is necessary to consider underwriting profits from this point of view for the reason that the statements of the companies afford no information as to their trade profits on the indemnity they sell.

The widespread misapprehension in the public mind regarding the profits of fire underwriting arises from the disparity between the capital stock on which dividends are paid and the actual assets which earn these dividends. To illustrate: One company is frequently cited as an instance of the enormous profits of fire underwriting, because it paid dividends last year of thirty per cent, and for ten years past has paid annual dividends averaging seventeen per cent of its capital stock. This company is

fifty years old, and has allowed its original capital of two hundred thousand dollars to remain unchanged. Its net assets now aggregate over two million dollars; hence a dividend of seventeen per cent on its capital is equivalent to one and seven-tenths per cent on its net assets. Many American companies do not increase their capital stock, but allow their underwriting profits to accumulate as a surplus, while their annual dividends are paid out of the earnings of their invested assets. This is done because it is desirable for every company to have a liberal surplus in order to avoid the possibility of impairment of its capital during protracted periods of adversity.

It is proper to add that during the past two or three years there has been a rapid advance in values of all standard securities, and this increase in the value of their assets enabled the fire companies to make unusual dividends from this source. This, however, has nothing to do with fire underwriting.*

Every company making the large dividends which are so much criticised has been in business from thirty to a hundred years, and the slow accretions of profits at compound interest have made their surplus very large as compared with their original capital. In some cases the assets of the companies are ten times as large as their capital. Thousands of business men increase their original capital tenfold in a business career of fifty years, so there is nothing unusual in the fact that a few fire insurance companies have done the same thing. The number

*The assets of fire insurance companies are invested largely in railroad and bank stocks, because the possibility of great conflagrations makes it necessary to have their assets where they can be promptly converted into cash, and standard railroad and bank stocks are always salable. The extent of the general advance in stocks during recent years may be judged from the following tabulation, which shows the range of prices in some of the leading industrial, trunk line railway, and bank stocks since January 1, 1898. It will be recalled that the advance of the past two or three years was preceded by a

of these companies could be counted upon the fingers of both hands, and they are enabled to pay dividends on their capital stock which seem inordinate, when, in fact, these dividends are very moderate when compared with the actual assets they maintain as a guaranty to their policy holders.

decline hardly less remarkable in 1892 and 1893, and some of the fire companies which have shown the largest growth during the past three years were brought dangerously near the line of impairment by the panic of 1892 and 1893; for commercial panics not only cut down the value of assets, but invariably cause a heavy increase in fire losses.

	RANGE IN VALUES SINCE JANUARY 1, 1898.		GAIN IN VALUES.
	Low.	High.	
RAILROADS.			
Atchison, Topeka & Santa Fe .....	.10	.25	150 per cent.
Baltimore & Ohio .....	.12	.62	417 "
Chicago & North-Western	1.13	1.66	47 "
Chicago, Milwaukee & St. Paul .....	.83	1.33	60 "
Chicago, Rock Island & Pacific .....	.80	1.22	52 "
Illinois Central .....	.96	1.22	27 "
Louisville & Nashville .....	.44	.76	73 "
Michigan Central	1.00	1.16	16 "
Missouri, Kansas & Texas .....	.10	.15	50 "
Missouri Pacific .....	.22	.53	141 "
Northern Pacific .....	.19	.56	195 "
New York Central	1.05	1.45	38 "
Pennsylvania	1.11	1.42	28 "
St. Louis & San Francisco .....	.06	.15	150 "
Union Pacific .....	.16	.50	212 "
BANKS.			
Bank of America, New York	352	440	25 "
National City, New York	1000	2000	100 "
Chemical, New York	3700	4100	11 "
Hanover National, New York	390	700	79 "
Corn Exchange, New York	275	340	24 "
National Park, New York	300	490	63 "
Second National, New York	450	550	22 "
New York County, New York	1100	1500	36 "
German Exchange, New York	260	359	38 "
Western, New York	140	350	150 "
Chicago National, Chicago	260	300	15 "
Merchants' National, Chicago	265	300	13 "
Northern Trust, Chicago	250	350	40 "
Union Trust, Chicago	230	300	30 "
INDUSTRIALS.			
American Sugar	108	182	68 "
General Electric	76	125	64 "
Western Union	82	98	20 "

In the published statements of every company the item known as "Surplus to policy holders" shows the net assets of each company after all liabilities have been deducted. This amount represents the actual money of the stockholders at risk in the business. The policy holders' surplus, in its entirety, is as much invested and at risk as that portion of each company's assets which is arbitrarily denominated "Capital Stock."

In estimating the underwriting profits of a company as shown by a percentage, the truer way is to compare these profits with the actual net assets appearing in the item known as "Surplus to policy holders." A comparison of this kind exhibits the percentage of underwriting profits in relation to the amount actually invested and liable for fire losses.

The following figures show the average annual underwriting profits compared with "Policy holders' surplus" for the ten-year period ending January 1, 1899, of all American companies with annual premiums in excess of one hundred and fifty thousand dollars, that have done a general agency business continuously for ten years :

Average net assets.....	\$94,949,548
Average annual underwriting profits.....	3,469,419
Average per cent of underwriting profits compared with net assets.....	3½ per cent

The above figures embody the experience of ninety companies with aggregate annual premiums of eighty million dollars. This is practically the entire business done by American companies not doing a purely local business. The statement shows that nearly one hundred million dollars of cash assets have stood as a guaranty to the public year after year for a consideration of about

three and a half cents on each dollar of actual assets in pledge. This certainly cannot be considered a tempting profit for an investment liable to be swept out of existence by a single conflagration, but small as it is, it really exceeds the average profits of all companies.

The Insurance Year-Book contains the published statements of four hundred and forty-eight American fire underwriting institutions in business January 1, 1899, as follows:

Stock companies.	248
Mutuals with cash assets exceeding \$15,000.	183
Lloyds.	17
<hr/>	
Total.	448

There are hundreds of other mutual companies whose cash assets are less than the amount named, and the records show that six hundred and forty-two companies of all sorts failed or retired during the ten-year period.

The net underwriting profit of all companies (see page 37) is shown in the last annual report of the National Board of Fire Underwriters. This report includes the published statements of all companies; hence, whether we view underwriting profit from the standpoint of dividends on policyholders' surplus, or simply as trade profit on the indemnity sold, it is safe to assume that for the past ten years this profit has been practically *nil*. If we consult the statistics of the business in the United States for any ten-year period since combined statistics have been maintained, we find that fire indemnity has been sold as a whole at almost exact cost. This may be due to the universal rhythmic law which causes everything situated among counterbalancing influences to vibrate about the

established dynamic mean of these influences ; but be this as it may, the indisputable fact remains that fire indemnity, taken as a whole, for any decade period, has been sold in the United States at almost exact cost ; that is, the selling price has been neither more nor less than actual disbursements for losses and expenses.

On this average or mean line of no profit, some companies have achieved a satisfactory trade profit out of the sale of their policies, while others experienced a constant loss. This difference is determined by relative skill in the selection of business, established reputation, and mastery of the secrets of finance and economics. These things tell in fire insurance as in every business ; but it is the acknowledged duty of fire insurance to provide indemnity for the aggregate property of the country, and it is the average trade profit from the sale of indemnity as a whole with which the public is concerned, and not the exceptional success of the few, for this exceptional success is found in every branch of industry as the reward of exceptional ability.

It needs no argument to prove that, with an average selling price which continually hovers so near the cost line, anything that adds to the cost of fire indemnity must either be added to the selling price (rate) or subtracted from the assets of the companies.

Fire Underwriting Profits Compared with Banking Profits

"One day a Hare (Fire Ins. Co.) bantered a Tortoise (Bank) for a race, thinking to have a Walk-away. The first dash the Hare left the Tortoise out of sight; but he soon ran into a pack of yellow dogs of the Loss breed, who chased him into the woods, where he encountered a slaving Monster known as a Rate-war, who relieved the Hare of his caudal Appendage and much of his Cuticle. Hardly had the Hare escaped the clutches of this Monster, when he fell in with a gang of boys called Local Agents, with sling-shots, who filled his digestive Apparatus with 'Tough-risks.' After limping forward a short distance, the Hare was confronted by a Gamekeeper with a gun, who officially informed him that he must die, as he was too badly impaired for any purpose other than Rabbit-pie. While begging for quarter, a big Cannibal of the Reinsurance tribe came up and unceremoniously swallowed the Hare, hide and hair.

"Meanwhile the Tortoise fared forward with unflagging Interest until he had reached the Goal, when he refreshed himself with a fat Dividend, whereupon, not seeing the Hare, he went about his business, convinced that Bunny had met with a Catastrophe."

In the preceding chapter the average underwriting profits were shown to be about one and one-quarter cents for each dollar of premiums received, or about three cents per annum on each dollar of capital at risk in the business. These figures were made up from official statistics on file in the insurance departments of the several states, which are accessible to every citizen.

A comparison of these profits with the average profits of banking may throw some additional light upon the subject. Banking, like insurance, is free from trust methods, and is public in its nature. Its affairs must be

laid open to public inspection through sworn statements furnished to the constituted authorities. Nothing is or can be hidden from the official examiners, whose duty it is to verify these statements. Banks have three sources of income, in the earnings of their capital, currency issues and deposits. Aside from an additional source of income, banking is a safe business, while fire insurance is exceedingly unsafe, and for this reason is justly entitled to larger returns on its capital.

The tabulated experience of national banks for twenty-eight years ending January 1, 1899, is as follows :

NUMBER OF EXISTING NATIONAL BANKS, JANUARY 1, 1899,—3,589.

Total capital.	\$540,238,293
Surplus.	163,429,076
Capital and surplus.	\$703,667,369
Average annual net earnings.	56,044,444
Average per cent of annual net earnings to capital and surplus.	8 per cent

This does not include the state banks, of which the figures are not accessible, though a comparison in states where the statistics of state banks are obtainable would indicate that the banking assets of the country are in excess of a billion dollars. These assets for twenty-eight consecutive years have earned an annual average of eight per cent, which is nearly three times the average profits of fire underwriting. In view of this fact, it is hardly to be wondered that about seven times as much American capital has sought employment in banking as in fire insurance, for other things being equal, a dollar, like a man, will seek the most liberal employer.

In the financial centers of the country where markets exist for all industrial securities, money flows into the

A Comparison with Banking Profits 45

best investments as naturally as water flows to a lower level, and an instructive comparison is found in these great financial centers. The following table shows the number of fire insurance companies and banks and their relative assets in the five great financial centers of the country :

		No.	Net Assets.
New York and Brooklyn	{ Banks	151	\$236,165,000
	{ Ins. Cos.	36	41,650,251
Philadelphia.....	{ Banks	71	79,573,172
	{ Ins. Cos.	15	19,125,617
Boston.....	{ Banks	60	75,720,067
	{ Ins. Cos.	4	3,655,168
Chicago.....	{ Banks	37	52,205,380
	{ Ins. Cos.	1	1,500,519
St. Louis.....	{ Banks	19	23,064,140
	{ Ins. Cos.	2	1,540,440
Totals.....	{ Banks	338	466,727,799
	{ Ins. Cos.	59	67,471,995
Per cent of insurance capital to banking capital.			14½ per cent

The disparity between insurance assets and banking assets is noticeable in Boston, Chicago, and St. Louis, and particularly so in Chicago and St. Louis, for these cities are located in the storm-center of the political agitation against the so-called "fire insurance trust." In these two cities there are fifty-six banks with assets of \$75,269,521, and three insurance companies with assets of \$3,040,959. In other words, in the Mississippi Valley, where we hear a constant cry about the inordinate profits of fire insurance, and never a word about the profits of banking, the money invested in fire insurance is only *four per cent* of the amount invested in banking.

In all the arguments so freely used among politicians in the Western and Southern states, to show how the peo-

ple are robbed in their fire rates, the dividends and surplus of a few fire companies are constantly quoted. The same argument applied to banks would show the insurance companies so far behind the banks that they are literally *hors concours*—"not in it." If the reader will refer to any financial journal, this assertion will be substantiated by the published statements not only of banks, but of railroads and "industrials" generally.

The following statement, showing par value, present cash value, and annual dividends of a few well-known bank stocks of New York City, is copied from the columns of the New York *Financier* of July 17, 1899:

NEW YORK CITY BANKS.

	Par Value of Stock.	Present Cash Value.	Annual Dividends.
Chemical.	100	4,151	150
First National.	100	3,105	100
Garfield.	100	450	40
Hanover.	100	735	10
Importers' & Traders'.	100	451	20
Lincoln.	100	860	12
National City.	100	2,010	15
N. Y. Co. National.	100	800	20
Second National.	100	485	10
Bank of America.	100	435	14
Bowery.	100	300	12
Corn Exchange.	100	365	12
Fifth Avenue.	100	3,001	100
Germania.	100	431	10
West Side.	100	300	12

As before suggested, a dollar, like a man, seeks the most liberal employer, and the relative amount of dollars invested in different industries is a fair criterion as to relative profits, for this criterion is established by self-interest.

A Comparison with Banking Profits 47

During the past twenty-five years over twelve hundred American fire insurance companies have failed or retired. Statistics do not show the amount of capital sunk in these defunct institutions; but during the same period, out of the surviving companies still transacting an independent business, the figures show that only thirty-two have been organized, with an aggregate capital of less than six million dollars. The relative earnings of banking and fire insurance capital, with their relative safety as an investment, clearly explain why capital, uninfluenced by political clamor, prudently seeks employment in other fields than fire insurance.*

*The state authorities of Arkansas, Kentucky, Missouri, and Texas have been notably active in prosecuting tariff companies for violation of anti-trust laws. Of the capital now engaged in fire insurance in these four states, *not a dollar has been invested during the past quarter of a century*. During the same period seventeen home companies failed or retired in these states, the figures for each state being as follows:

	FAILED OR RETIRED.	STILL IN BUSINESS.
Arkansas Companies	1	0
Kentucky Companies	10	4
Missouri Companies	2	2
Texas Companies	4	0
Total	17	6

About Rates

“Not chaos-like, together crushed and bruised,
But as the world, harmoniously confused;
Where order in variety we see,
And where, though all things differ, all agree.” .

It would be interesting to follow the chain of reasoning through which the first fire company established a price for the indemnity it sold. The first attempts at systematic fire insurance were made soon after the great London fire in 1666. We read that soon after, a charge was established of two shillings per cent for brick and stone buildings, and four shillings per cent for brick and timber houses, regardless of exposure or occupancy. In 1721 (fifty-five years later), these two original building classes had become subdivided into common, hazardous, and doubly hazardous.*

Since this crude beginning underwriters have been constantly studying the laws of fire causality, and at present every company that expects to transact a general fire

*The slow evolution of schedule rating is shown in an interesting way by every new class of hazard. When the companies began to write tornado insurance, about fifteen years ago, all risks were written, regardless of physical characteristics or location, at the uniform rate of fifty cents per annum. Soon after the great St. Louis cyclone in 1896, a conference revealed that the business could be written for much less, and rates were voluntarily reduced about thirty per cent. Since that time, tornado rates have begun to differentiate in certain geographical areas, as determined by their location with reference to storm belts. There is also a growing tendency to make class tornado rates with reference to construction of buildings and nature of contents.

Another interesting illustration is found in the so-called sprinklered risks. While rates on all sprinklered plants have been largely reduced, there has as yet been no attempt made to measure the relative merits of sprinkler installations through basis schedules. It may be said that the rating of tornado risks and sprinklered risks is in the embryonic state that characterized all fire rates immediately after the London fire in 1666. In time general experience will doubtless evolve complete basis schedules for these new hazards.

business must, as a prerequisite to intelligent conduct, equip itself with an extensive library of diagrams and tariffs, showing the construction and occupancy, and giving an estimate of the rate on every building in every city, town, and village in every state where it transacts business. Without this information its movements would be as aimless as those of a befogged vessel in midocean without rudder or compass. In the old days, when there was no competition, each company could fix its own price, and the margin of profit between cost and rate was so wide as to leave room for guess-work; but since this margin has been reduced by modern competition to less than two per cent, no company can dispense with a library of information, which must be in duplicate, a copy of local map and tariff being furnished to each of its agents.

The information contained in this library is never complete. Every change in occupancy, exposure, or construction of a building must be promptly recorded; for if the information be not kept strictly up to date, it becomes not only worthless, but a source of positive danger to the company. To do this it is necessary to keep a force of inspectors in constant motion in every state to personally inspect every risk at short intervals, and report changes in physical hazard, in order that the rate estimate may at all times be consistent with the hazard. This work of inspection, reinspection, and publication of rate estimates costs in the aggregate over a million dollars per annum. It would require an outlay of probably ten million dollars to replace the accumulated data in rate estimates alone. The cost of diagrams alone may be estimated from the fact that a single copy of the fire map of Chicago costs one thousand three hundred dollars, and

the work of keeping this corrected costs each company about five hundred dollars per annum. Every general agency company, in order to transact business intelligently, must have a permanent investment in maps and rate estimates of from twenty-five thousand to two hundred and fifty thousand dollars, according to the extent of its business. A single company could no more afford to compile and maintain this data than a single person could afford to compile a dictionary or encyclopedia for his individual use.

A description of the minutiae of rating methods would be as tedious and unprofitable to a lay reader as a treatise on trigonometry; but it is self-evident that a system which has grown out of past experience, which has been cheerfully acknowledged since the beginnings by fire underwriters, and for which no substitute has ever been offered or even suggested, must in the nature of things be a logical and practical system. It is, in fact, a world-wide system which no company can afford to maintain in its own behoof, and without which no company can live.

In these facts lies the necessity for associations general and local, as well as for basis schedules and local tariffs, for these things are to fire insurance what libraries are to civilization, or the compass and chart to the navigator.

The Mystery of the Individual Rate

"Mastering the lawless science of our law,
That codeless myriad of precedent,
That wilderness of single instances."

Fire insurance is the only branch of insurance which attempts to make a specific rate for every risk. In life insurance, the mortality tables show that under normal conditions people live to a certain average age, and at any given age a standard person has an average expectancy of so many years of life. On this crude system of reckoning the rate is established for every person of a given age who is up to the required standard; if below this standard, the risk is rejected.

Fire insurance, on the other hand, must examine into every detail of every risk, calculate its rate from its physical features, and recalculate its rate for every material change. Nor can the fire risk, like the applicant for life insurance, be expected to go to the examining physician's office to be inspected and rated, so the company must, at its own cost, send a representative to the risk, anywhere from Maine to Texas, or from Florida to Alaska; and in estimating the rate of the risk, allowance must be made for its location, construction, occupancy, environments, and the nature and degree of its protection in the way of fire department, or internal fire-preventing devices, including its arrangements for heating, lighting, and motive power, if any.

Burning buildings are liable to set fire to other buildings in their vicinity, and nearly everything contained in a building is a possible incendiary. This reciprocal influence must not only be estimated, but re-estimated for every change. But after due allowance has been made for the more or less known properties of matter, there remains an incalculable residuum of causation. A cold wave, a drought, a gale, or a commercial panic may increase the annual fire waste from ten to a hundred million dollars, while a new law, a new interpretation of an existing law, or even the mere ruling of a state official, may be the source of an upheaval in the average cost of fire insurance.

These are some of the things which make fire rates fundamentally different from rates in other branches of insurance, and which cause so much friction, not only between fire insurance and the public, but among fire underwriters themselves. People see companies and agents playing ducks and drakes with established rates; they see here and there a relentless fight, extending perhaps from a single risk to a town, city, or even state, and very naturally infer that all rates are pure guess-work anyway, and that the contempt shown by underwriters themselves for established rates, simply shows how the fire insurance trust has been robbing the public. Competitive conditions of this kind, however, are so rare that they have no appreciable effect upon the aggregate business of the country; they have about as much influence upon average results as a "shooting scrape" or street brawl might have on the loss ratio of the accident companies. Where a rate war extends to an entire state, it may determine the retirement of a weak company or two at the end of the year, but as a whole, it simply

serves to increase the average cost ratio of the country by a small percentage. That these things should create the inference that fire rates are the result of pure conjecture is natural, but the inference is false. The fire rate is the farthest possible remove from guess-work. In point of equitable distribution, it puts to shame the taxes assessed by our municipalities, states, or even the national government. As a system, it is more carefully thought out, more elaborate, more logical, and more just than any governmental system of taxation.* As a tax, it is assessed so close to aggregate cost that for long periods the residuum of underwriting profit is hardly more than an ordinary brokerage. The way in which this is done affords a curious illustration of the unchanging nature of the laws of average over large areas and for long periods of time.

When a company appoints an agent, it must, as before stated, supply him with a map showing every building in his town, in order that he may be able to so advise the company that it can identify each risk when insured. The company must also supply a local tariff, showing the estimated rate on every building and its contents. With this map and tariff, the agent is supposed to be equipped for his work. The first question asked by every one from whom he solicits business is about the rate. If the risk be say a planing-mill, the agent consults his tariff, and finds the rate to be \$5.10 per annum for each hundred dollars of insurance.

In all probability neither the agent nor his patron has

*The crudities of taxation are shown, for example, by the tax to maintain fire departments. There is no essential difference between this and the tax known as the fire rate; one is a tax to prevent destruction by fire, the other a tax to make good the destruction; yet the fire department tax charges the same rate for say a planing-mill as for a dwelling, while the hazard of the one is perhaps twenty times as great as the other.

any definite idea as to how this rate is reached ; but if we trace it back to its origin we shall find that it was established by a schedule of basis rates, and is the result of numerous charges and credits for specific features of the risk.

If the reader will refer to Appendix he will find a sample basis schedule of three classes—planing-mills, packing-houses, and flouring-mills. In every state, where not forbidden by law, similar schedules exist for every one of the important property classes. Each item in these schedules represents the consensus of opinion reached through experience ; in many cases the charge is established only after long experimentation on the part of scientific experts.

Every risk, wherever located, must be analyzed, and its rate estimated according to its class schedule.

The rate of the risk in question, as it appears in the tariff, is made up of possibly a dozen items out of the planing-mill schedule, say as follows :

CHARGES.

Basis rate.	\$2.25
Add for frame building.	1.00
Add for additional story. ....	.20
Add for one planer not provided with metal blower. ....	.20
Add for wood conveyer. ....	.10
Add for no casks of water on roof. ....	.20
Add for no watchman. ....	.20
Add for no standpipes or hose. ....	.50
Add for metal stack to boiler-house. ....	.50
Add for opening between mill and boiler- house. ....	.25
Add for wooden-shavings vault.	1.00
Total charges.	<u>\$6.40</u>

The Mystery of the Individual Rate 55

CREDITS.

For fire department.....	\$1.00	
For live steam in shavings vault.....	.25	
For mercurial alarm. ....	.05	1.30
Rate.		\$5.10

The first thing to occur to a person unfamiliar with the subject would be that each and every one of these charges is purely arbitrary. No one could tell, for instance, what the basis rate should be. The same would hold good with regard to the charge for metal stack or for wooden-shavings vault, or for the absence of watchman or water-casks. All these charges, though they embody the combined experience and judgment of practical underwriters, *are* arbitrary; but there is another side:

1. Each of the charges is as fair for one as for another; the fixed charge insures equal treatment to every customer, and to every property class.
2. Each charge is educational in showing the insurer how he may lower his rate by improving his risk.
3. The charges stimulate improvements in the construction of buildings, and care in the protection of property, thus reducing the dangers from within and without.
4. Each charge is self-adjusting; if not forced down by competition, the final court of equity, known as classification, eventually proves or disproves its justice.

In this way it may be said that the system of specific charges and credits is a natural evolution from aggregate experience and competition.

There may not be another planing-mill within fifty miles—perhaps not a half-dozen similar risks in the entire state. Left to his own judgment, the local agent would

be utterly at sea as to a proper rate. There are not enough planing-mills in his entire state from which to establish an opinion; for perhaps five years none of them have had a fire; the next year, possibly, half of them are destroyed, and even if the agent had personal knowledge of them all, there are not a sufficient number of planing-mills in his state to establish an average. The first five years the agent might naturally infer that planing-mills could be written for next to nothing; the next year he might, with equal reason, argue that rates ought to be increased fiftyfold to make good the losses.

The function of insurance is to disperse the blow of disaster from the individual to the community, and under the law of averages the wider it is distributed in space and time the less the blow is felt. The modern warship is built to distribute the impact of a twelve-inch shell from the spot where it strikes to all parts of the vessel; so the destruction of a planing-mill in a state where there are perhaps not six similar risks, which would bring disaster to the planing-mill industry of the state if this industry had to bear its own losses, becomes a bearable and uniform tax when the loss is distributed among all the planing-mills of the United States.

In its finality, fire insurance, under whatsoever guise, is mutual—the individual risks of each group or property class must share each other's burden. Each group, as a whole, must in the end pay its own losses and expenses. Saloons and breweries have no right to call upon temperance halls and schools to make good their fire losses, nor theaters or dance-halls upon churches or salvation-army barracks; for these classes have nothing in common in their physical hazard, while socially they are irrecon-

cilable enemies. Fire insurance has no moral right to bring these classes into partnership, nor to rob one for the benefit of the other. On the other hand, it is its duty to classify property groups, separating the unlike and grouping the like, crediting each class with the premiums it pays, and charging it with its losses and *pro rata* share of the expenses of conducting the business. This is the most important duty, as well as the most sacred trust, imposed upon the industry. Mutual insurance is inadequate for the duty or the trust, and in the simple fact that each property class must stand alone lies the secret—so hard for the public to understand—why mutual insurance companies cannot succeed in transacting a general fire insurance business. Theoretically, fire insurance is based upon the principle of mutuality, but the mutuality does not extend from one property class to another. The business of a mutual company is, as a rule, confined to the state where it is chartered, because it cannot legally do business in other states. Having no cash assets, it must meet its obligations by assessments upon the policy holders, but the loss ratios of single states, taken as a whole, fluctuate widely, and when we come to the loss ratios of individual property classes, the fluctuations assume tremendous proportions, especially in classes where large values are concentrated. A single fire in a terminal elevator, packing-house, oatmeal-mill, or brewery might consume half the value of all property of the class in a state. The mutual company cannot assess one property class to pay for losses on another class; and to compel other risks of the same class in the state to make good the loss would be equivalent to confiscation. The stock company advances the money to pay the loss out of its own

funds and takes its chances of making itself whole in time out of the premiums received from other risks of the class, from all parts of the country, and it not infrequently requires several years for it to get its money back. To preserve the independence of each class and save it from ruinous rate fluctuations, stock insurance maintains a reservoir of assets to tide over long periods of abnormal loss ratios.

But dangerous fluctuations in the loss ratio of individual states are not confined to specific property classes, for these fluctuations extend to the loss ratio of each state as a whole. Hardly a year passes that a conflagration does not double or even quadruple the loss ratio of some state. The Chicago and Boston conflagrations of 1871-2 would have bankrupted the people of Illinois and Massachusetts if the loss had not been distributed over the entire country. Prior to the recent fire at Dawson, the most profitable field for fire insurance perhaps in the world had been Alaska; but it will take the entire premiums of this territory for the next twenty-five years to make good the losses in this one conflagration. *

Experience has further shown that the business of a single company, even for the entire continent and for long periods of time, is too limited to establish reliable averages. In the unusual classes where large values are concentrated, the premiums received by a company for a ten-year period may not be enough to pay a single loss, but if the ten-year experience of all companies be combined, a close approximation to the true average of every important class is revealed, and it becomes possible to establish basis schedules founded upon actual experience; and on this experience companies can safely write each

* Since the above was written, Dawson has been rebuilt and nearly destroyed by another conflagration.

The Mystery of the Individual Rate · 59

class, even at the small average profit of one and one-fourth per cent.

The experience of single towns, cities, or states, single years or single companies, is inadequate to establish true averages. The individual rate is the apex of a pyramid, whose base is bounded by continents, decades, and combined experience. If each company should simply guess at rates, a comparison of its losses with its premiums would give no information as to the proper adjustment of rates among classes. Classification would be useless without statistics and established rates.

Classification.

"All reasoning is definable as the classification of attributes and relations. The dependence between reasoning and classification is reciprocal. They are simply different sides of the same thing, the complements to each other. Human intelligence, civilized and savage, in common with intelligence at large, proceeds by the classing of objects, attributes, and acts, each with its kind."

The one attribute common to all intelligence, from the monad up to man, is the ability to detect similarities and dissimilarities, to group things that are like and separate things that are unlike.

Classification is the universal solvent of complex facts. The doctor classifies diseases and their remedies. Speech, writing, and printing, through which human minds communicate with each other, are the result of classification. Fire rating belongs to the purely classificatory sciences. Every science must have its crude beginnings. The chemist is the descendant of the alchemist, the physician of the sorcerer, and the astronomer of the astrologer. Schedule rating is the growth of more than two centuries, and while as a science it is, like meteorology, still in its beginnings, it is based upon correct reasoning, headed the right way, and as much entitled to the respect and encouragement of the community as the national bureaus of statistics and meteorology.

As the living being at its birth begins instinctively to classify its impressions, so must the fire insurance company. For many years its classifications are necessarily

so limited as to be of little value as a guide; its life, like infant life generally, must be precarious until experience has developed the intelligence which enables it to distinguish the good from the evil.

On the slender margin of present profits, without experience or skill in avoiding the hidden pitfalls of physical and moral hazard, the new company at the present time would be certain to fail but for the fact that it finds ready to hand, in the local tariff of every town, the stored-up knowledge and experience of its predecessors and associates. These tariffs, accessible to every company, are its only guide. With this basis of information, and the managerial skill and experience which can always be employed, a new fire company's chances for success are about equal to the chances in other overdone industries. Instead of being in restraint of competition, the printed fire tariff is the nursing-bottle for inexperience, the only possible means through which the infant company and inexperienced agent can survive the perils of dentition.

It is the duty of fire insurance to throw the mantle of its protection over every species of property, in which are implicated many thousands of distinct features of fire hazard. The slow process through which these hazards have coagulated into a few hundred distinct classes with common characteristics is the result of two centuries of observation.*

In order to maintain classifications, each company must keep a ledger account with each class group, showing

*The grouping of hazards varies more or less with the individual companies though in the most important classes there is approximate uniformity.

A sample classification list will be found in Appendix. This list will give an idea of the variety of property classes protected by fire insurance. An alphabetical list shows over three thousand varieties of hazard of mercantile, industrial, and storage occupancy, including manufacturing processes and inherent hazard of merchandise itself, whether crude, manufactured, unmanufactured, or "in process."

the premiums received and losses paid, from the totals of which the loss ratio of the class is determined. No company keeps a record of all these classes, because no company insures them all, and for the further reason that many classes are so infrequent that they are necessarily bunched into the group known as "Miscellaneous," in which rates are established by analogy.

The crying need in fire insurance, and the inevitable next forward step in the evolution of the industry, must be uniformity in the classifications maintained by, and an annual codification of the combined experience of, all companies.

The Fire Rate as a Tax

"Equal rights to all, exclusive privileges to none, is the basis of free institutions."

The fire rate is a tax, and as such, the interests of the citizen are the same as with reference to other taxes. Each person desires fair treatment and no favoritism. He wants to know that he is paying no more for the same thing than his neighbor. This principle is recognized by the national and state laws, which forbid railroads to discriminate in favor of individuals or localities. The Inter-State Commerce Commission, instituted by Congress to enforce the national law against railroad discrimination, has been laboring with its problem for several years. At a recent meeting in this city, in the presence of the entire commission and a large audience of prominent railroad officials and business men, the chairman presumably gave official utterance to the views of the commission in the following language:

"But as respects public transportation, which is not property at all but a service, we do want uniform charges under like conditions—without preference or exception to any person. Properly considered, the tolls paid to the carrier are in the nature of a tax, and the relations between railroads and their patrons are not contract relations, save in a limited sense and for special purposes. Therefore, whatever tends to stability and uniformity of charge by railway carriers is on the whole to be desired and promoted. Practically, therefore, *the choice lies between competition on the one hand, with the inevitable outcome of dis-*

criminations which favor the few at the expense of the many, or like charges for like service, which can be realized only by allowing co-operative action by rival railroads.

"The facts of experience and familiar knowledge demonstrate the error and inconsistency of a legislative policy which makes rate competition compulsory, and at the same time condemns as criminal misdemeanors the acts and inducements by which in other spheres of activity competition is mainly effected. For this reason I advocate the legal sanction of combination by rival carriers in the conveyance of passengers and property between competitive points. This is the one sensible and practical plan, adapted to present conditions and suited to existing requirements. Such a policy would promote and invite the conduct of public transportation upon principles consonant with the nature of the service and beneficial to the people and the railroads alike.

"Should there be other protection against rebates and secret concessions? Most assuredly. Legalized pooling would promote public welfare, because it would give railways the opportunity now lacking to conduct their business by just and honest methods, and range their interest and influence on the side of law. But this safeguard should be aided by every legal sanction that can be devised. By penalties and forfeitures, by the rigorous enforcement of criminal statutes, by aroused and dominant public conscience, *I would make every sort of rate-cutting, whether by railroad agent or a ticket scalper, as disreputable as chicken-stealing and as dangerous as highway robbery.*"

The same principle was set forth at the same meeting by another speaker in the following language:

"There should be no unjust or unreasonable discrimination in rates. The greatest prosperity will come from the greatest stability in transportation charges. Rates should be so fairly adjusted as between shippers and between localities as to work no injustice. Every man, however modest, every hamlet, however humble, should be given a fair show to exist.

"The transportation tariffs of the country should not discriminate in favor of any particular locality, individual, or industry. They ought to be so adjusted that the small shipper and the

small town will have the same relative right and opportunity that the big shipper and the metropolitan city possess. . . .

"I am opposed to any system of fixed maximum rates. The very fact that the service rendered by the railroads is composite, and results from a multiplicity of things like wages, material, supplies, brains, the prices of which are not fixed, makes it unfair to fix a cost for the whole without in any way limiting the cost of the component parts."

The laws of many states recognize the same principle in life insurance rates, by forbidding a life insurance company "to make or permit any distinction between insureds of the same class and equal expectation of life in its established rates."

Under these laws, neither the life company nor its agents are at liberty "to pay or allow or offer any person insured any special rebate or premium, or any special favor or advantage in the dividend or other benefits to accrue on a policy, or to promise the same to any person as an inducement to insure, or to promise to give any advantage or valuable consideration whatever."

Fire insurance rates are as much a tax as railway or life insurance rates, and there is the same reason why every person should be treated fairly. But the anti-compact laws compel fire insurance to do business on the "open competition" plan, under which equitable treatment to property classes or individual patrons is impossible. No one has been able to explain why the law-makers require of railways and life insurance what they forbid to fire insurance. If fire companies were also forbidden to discriminate, tariffs would become indispensable, for there is no other way to avoid the discrimination that by general consent is admitted to be *ultra vires* in railway and life insurance rates.

During the recent national convention held in Chicago under the auspices of the Civic Federation, for the purpose of discussing the trust problem, this inconsistency permeated the entire proceedings. The gathering was a notable one, in that it was composed of delegates from nearly every state, every important industry, and every shade of political belief.

It is interesting to note that, in the utter divergence of views on every other phase of the trust question, there was a substantial agreement in the admission that *most of the great trusts owed their existence in no small degree to discrimination in railway rates*. The two most prominent speakers, W. J. Bryan, of Nebraska, and Bourke Cockran, of New York, agreed in this admission. Mr. Bryan's language was as follows :

"It has been suggested that discrimination in railway rates has aided the trusts. No question about it. If any man can secure from a railway better rates than another man, he will be able to run him out of business, and there is no question that discrimination and favoritism secured by one corporation against another producer, and a rival, have been largely instrumental in enabling a desired monopoly to become practically a complete monopoly. Now, that can be remedied by laws that will prevent this discrimination."

In the statement that railroad discrimination had aided the trusts, Mr. Bryan apparently voiced the united sentiment of the convention; and, as we have just seen, the Inter-State Commerce Commission and railway officials themselves virtually concede the fact.

The chairman of the Inter-State Commerce Commission admits that there is no difference between discrimination and open competition, and rightly, for they are

synonyms. Discrimination is open competition, and open competition is discrimination; hence, by the tacit admission of every delegate to this memorable convention, the open competition so desirable in other industries is the source from which most of the trusts derive their origin.

The daily papers of Columbus, Ohio, recently announced that a prominent manufacturing establishment of that city, during a squabble among agents over the rate, had secured its insurance for the ensuing year at a saving of six thousand dollars over the previous year's rate. No claim was made that the previous year's rate was too high; as a matter of fact, it was not. The six thousand dollars was practically a gift to the manufacturing corporation out of a fund collected from the community, and a wealthy corporation belonging to a trust was benefited by this donation, precisely as it would have been benefited by a saving of six thousand dollars through discrimination in its railway rates. The fire rate, like the railway rate, is a tax, and discrimination, or its equivalent, open competition, affects the public in the same way. Yet, during the entire proceedings of the anti-trust convention, while everybody admitted the injustice of discrimination in railway rates, no one spoke of the evil of discrimination in fire rates.

The Rating Association as a Public Servant

"The whole crux of civilization seems to me to lie in the fact that the savage does what is best for himself, and the civilized man what is best for the community at large. Government is but a great mutual insurance society against human selfishness."

Having sketched the system through which rates are made, it is proper to inquire into the relation of this system to public interests. This relation may be considered from the standpoint of the individual, the state, and the public at large.

It is true that the local tariff is constructed empirically ; that each rate is built up from arbitrary charges, but these charges do not discriminate among property owners. The charge of five cents for an open hatchway, or ten cents for additional area, may be too much or too little, but it applies to every risk that has this feature, and is as fair for one as for another. If too high, competition soon compels a reduction or waiver of the charge, and in time classification reveals whether the charge be too high or too low. From every standpoint the local tariff is just to the individual citizen, and it cannot be waived in favor of an individual, property class, or locality without injustice.

The interests of the several states are clearly conserved by the tariff system. We hear a great deal in certain states about state rates, but to the Fire Fiend state boundaries are as imaginary as the degrees of latitude or longitude, except as these state boundaries contain politi-

cal influences which increase the cost of fire indemnity. If the several states should decide to embark in the business of fire insurance, as has been often suggested, they would find that not even their own loss ratio as a whole was homogeneous. In Texas, Ohio, Indiana, and Illinois, the southern half of each state has had a higher loss ratio than the northern half. In Minnesota and Wisconsin the experience has been just the reverse. In Kansas, Nebraska, and the Dakotas, the western half of each state has been more prolific in losses than the eastern half; in Colorado the experience has been the reverse. If these states should embark in fire insurance as a state industry, each would have to construct a dual tariff to adjust these sectional differences, and this adjustment would be likely to be the source of sectional dissension which would play a prominent role in state politics. Again, endless friction would result from the attempt to adjust the relative rates of property classes upon the experience of the several states, for each citizen is more vitally interested in the rates of his class than in the rates of his state as compared with other states.

And after all, what would or could be the outcome of this attempt on the part of the state authorities to adjust irreconcilable differences between sections and among property classes, except a tariff similar in every respect to the tariff the companies are forbidden to use—a tariff minus the advantages of national averages, and plus the disadvantages of constant and corrupt political wire-pulling?

Fire insurance is a series of class partnerships regardless of state lines, and not a solidarity of miscellaneous and irreconcilable property interests which happen to be

located in the same state. Commercial and manufacturing interests demand that the fluctuation of their expense ratio be kept within narrow limits, and this can be done only by allowing each to share in the benefits of a joint interest in the loss ratio of the property class throughout the entire Union.

If all the risks of his class throughout the United States contribute to A's loss, his rate may run on for years without material change; but if he must depend upon his own class in his own state, his rate may vary all the way from nothing to the confiscation point.

Under established tariffs, when the losses in an important industry become abnormally heavy, fire insurance furnishes the capital to reinstate destroyed values, becoming a creditor of the class, frequently for many years, until it can recoup itself from the premiums received from the class, from all parts of the country. The states could not do this. The salt works of Kansas, the beet-sugar works of Nebraska, the packing establishments of Iowa, the glucose works of Illinois, the plate-glass works of Missouri, and other unusual risks of large value, would simply have to insure themselves, under the blessings of state insurance.

The fire tariff adjusts conflicting interests, and keeps the wheels of industry in motion in every state, regardless of individual state experience, and accomplishes smoothly and justly a function indispensable to the body politic which the states themselves can never satisfactorily perform.

The effects of tariffs upon the general interests of the community at large may be divided under two heads—educational and protective.

In all towns where buildings stand close to each other, any building may be the starting-point of a great conflagration. It is for the good of each citizen that every dangerous feature of occupancy or construction be kept under a healthy curb, and that this work be done intelligently, consistently, economically, and without fear or favor. It is clearly for his interests that every reasonable encouragement be afforded for his neighbors to make their property safer by improvements, for these improvements lessen the dangers from exposure to his own property. In some parts of Europe every citizen is held responsible for fire damages originating on his premises. In this country there are no laws to prevent a man from endangering his neighbor's property, but the fire tariff protects the community in a way that is ideally just, by penalizing dangerous features in all property, without regard to ownership. In this respect, tariffs are a safeguard against dangers that menace every city and village of our land. They perform a useful function that can never be satisfactorily performed by the states themselves.

The printed tariff shows every person just what reduction he can get for an improvement in his risk. An iron shutter, a brick chimney, or a parapet on an exposed wall may reduce the annual rate more than the entire expenditure. In the absence of tariffs there would be no inducement to make improvements of this kind, and the insecurity of the community from fires would be correspondingly increased.

In addition to this encouragement offered by tariffs for the betterment of individual risks, they give proper credit in rates for fire departments, and have had more influence than any other one cause in building up fire

protection everywhere, and bringing about improved construction in buildings, good building laws, and effective systems of water-works.*

The tariff is also a safeguard against dangerous innovations in heating, lighting, and industrial processes. There is no end to innovations of this kind. When natural gas was discovered, people began to use it without the slightest knowledge of its dangers. The companies investigated its qualities, and permitted its use only under safe restrictions.

A few years ago people began to exhibit a mania for sprinkling their stores with coal oil, in order to avoid dust in sweeping. The practice was dangerous, and the companies refused to permit it in their policies.

The present hazard of applied electricity is hardly twenty years old. In every town of any size the earth, air, and buildings, inside and out, are criss-crossed with harmless-looking wires charged with destructive potentialities of which people are blissfully ignorant. Any one of these wires is liable, through unforeseen accident, to become white-hot with death and destruction. It is a peculiar feature of the electrical hazard that no one can foresee where or in how many places it may break forth. Other causes originate fires in but one place at a time, and that where the cause is located; but electricity may start a dozen simultaneous fires miles away from the original cause. Many cases are recorded of three, four, and in one case seven simultaneous fires in as many different buildings, started by a single wire. Another pecul-

* Fire departments originated with insurance companies, and for about a century were maintained at the individual expense of the companies. The London fire department was not turned over to the city authorities until 1866. Salvage corps are now maintained by the local boards in every large city in the United States.

ilarity is the apparently insignificant nature of the cause which originates these fires. A frayed or broken wire, contact of wire with metal cornice or roof, a nail driven through wood coming in contact with wire, dripping water, condensed steam, rain, fog, etc., may be the cause of one or several conflagrations. The accidental contact of a harmless telephone wire with a trolley wire may start a fire in every house containing a telephone on that circuit. Recently a fallen tree started two fires several miles distant. Other similar cases might be cited indefinitely, but these suffice to show the subtle, mysterious danger which threatens every community from electricity. The only safety is in careful installation and thorough insulation, and this has been accomplished by the companies at their own expense, after years of expert investigation, and permits are granted to the public for the use of electricity without extra charge, when installed in conformity with rules which have been formulated by underwriting associations. It is obvious that electricity could not be safely used under less careful restrictions.

The printed rules for the proper installation of the three electrical systems known as the high potential, low potential, and alternating cover every detail of apparatus and wiring for heat, light, and power. These rules are embodied in a book of about forty pages, constituting the only complete and intelligent code for the control of electricity. Over seventy-five cities are now exercising municipal control of installations, through ordinances which embody these rules. They are generally enforced elsewhere through the supervision of underwriters' associations. If the formulation of these rules had been left to municipal politics, it is safe to say that the work would

have been left undone, and it is equally safe to add that it would not have been done by the companies themselves in the absence of tariffs and rating associations.

The new illuminant, known as acetylene gas, is now being introduced into homes throughout the country. This gas is made by allowing water to drip on a substance known as carbide, an innocent-looking substance which has much the appearance of limestone rock. The gas has a tremendous explosive power, and the danger of having the carbide about, lies in the fact that it generates gas if left where there is the least moisture in the air. Some bad fires have occurred from water backing up into cellars, and an open faucet in the vicinity of carbide may become the source of explosion and conflagration.*

During the past three years over one hundred different patents have been taken out for acetylene generators. Each of these machines has been examined by a committee of insurance experts, and approved or disapproved. Comprehensive rules for the installation of generators and the storage and handling of carbide have been formulated and enforced in all parts of the country by the associated companies.

*The innocent appearance of carbide and the general ignorance as to its dangerous qualities are shown by the fact that it was recently discovered that some of the leading department stores of Chicago were keeping tons of this substance for sale in their basements, where it would be reached most readily by water. There is hardly an hour in the day when there are not thousands of people in these establishments, and the consequences of a small amount of water coming in contact with this carbide are appalling to contemplate.

These dangerous conditions might have continued indefinitely had they not been discovered by the insurance inspectors maintained by the local board. The promptness with which this state of affairs was cured is shown in the following extract from the *Inter Ocean* a few days later:

"The inspectors found a really startling condition of affairs. One department house had five tons of the stuff inside its building, as against the limit of one hundred pounds in small metal packages and in a water-proof iron box. Experts are hardly able to imagine what the result would have been if there had been a fire, and water had come in contact with this immense quantity of exceedingly dangerous explosive. A number of others had smaller amounts, but even the smallest was enough to wipe out an entire building, and destroy thousands of lives. One merchant who refused improvement had his rate increased one per cent, whereupon he suddenly found that it was possible to keep the stuff outside, after all."

The storage and sale of fireworks, explosives, and dangerous chemicals is regulated by the tariff, and carefully formulated policy permits prepared by the rating associations.

An interesting illustration of the protective influence of rating associations is found in the long and determined resistance made to the storage, sale, and use of gasoline, benzine, and naphtha. In the process of refining crude earth oils, the distillation produces about forty different "by-products," among which are gasoline, naphtha, and benzine. These substances are extremely volatile, and at a low temperature give off vapors which spread out until they reach a fire or light, when there is an explosion as violent as that of gunpowder.

These products of crude petroleum are far more dangerous to life than gunpowder or dynamite, because the latter are inert, and will not explode unless the cause be applied to them direct; but all the lighter products of petroleum are volatile, and their vapors wander forth in quest of the nearest fire or light.*

Colossal fortunes have been made out of coal oil in this country, and it would seem that the people who control it might, in the interests of public safety, find some other use for these dangerous products than in our homes, where they endanger the lives of innocent women and children; but the finding of a market for these by-products involved an enormous increase in profits, and for

* A notable instance of this dangerous tendency of the vapors of gasoline is selected from innumerable newspaper accounts of gasoline explosions.

On July 7, 1899, Mrs. D., of Washington, D. C., wife of a prominent naval officer, and a well-known authoress, was cleaning some rugs with gasoline. Two plumbers had been fixing the roof, and were descending a ladder *outside* with a lighted melting-pot. The vapors came out of the room, and caused an explosion which killed the lady and severely injured one of the workmen. The explosion blew out the entire third story of the house, a substantial brick residence, and was so violent that it rent the stone steps in front of the house.

the past twenty years or more, the most insidious and persistent efforts have been made to force these murderous substances into American homes, under the claim that they were perfectly safe. From their inflammable nature they make an ideal fire or light, if we ignore their dangerous nature. First the gasoline stove was introduced; insurance companies for a long time prohibited their use, but the pressure became so strong that consent was finally given for the use of these stoves for a moderate charge and under rigid restrictions. This charge was intended to operate as a deterrent, but the country was flooded with advertising matter claiming that gasoline stoves were perfectly harmless, and non-tariff companies began in time to permit their use free of charge, which in time forced the tariff companies to do the same in order to protect their business.

Quite recently it was found that the Welsbach burner attached to a gasoline lamp made a brilliant and inexpensive light. The companies during all these years had refused to permit the use of movable gasoline lamps, but the discovery that this product could be used with the Welsbach burner resulted in the country being again flooded with advertising literature intended to show the cheapness, brilliancy, and perfect safety of this light. Again, the independent companies set the pace by permitting the use of these lamps without charge, and again the associated companies were driven by the stress of competition to follow their example.

The last bulwark was finally beaten down, and to-day gasoline, benzine, and naphtha are used in stoves and lamps in all parts of the country, free of charge, and the daily papers teem with accounts of the destruction of

whole families by these vicious substances, while the state legislatures are too busy enacting laws against fire insurance associations to give any attention to the people who have at last forced the unrestricted use of their "hell broth" upon the unsuspecting public at the expense of a daily holocaust of life and property.

In theaters, hotels, department stores, and other large buildings where humanity congregates, the tariff exerts a constant and potent influence in making life and limb more safe. It is true that this influence is the outgrowth of selfish motives, for the aim of the tariff is simply to fix an adequate charge for each factor in the total of fire hazard; but if the tariff in doing this serves the double purpose of conserving property and human life, it exerts none the less a beneficent influence. The highest wisdom of legislation is to direct selfish motives toward salutary ends.

The non-associated companies have never co-operated in the work of reducing the dangers to life and property; on the contrary, they have been a constant and active influence in encouraging these dangers.

If the associated companies, through the financial suasion of the tariff, serve the American people as a national police for the suppression of the lawless proclivities of matter and the selfish proclivities of man, common sense suggests that some effective substitute be found before suppressing rating associations as public malefactors.

Do Rate-Cutting and High Commissions Lower Rates?

"I hold every man a debtor to his profession from the which, as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves, by way of amends, to be a help and ornament thereto."

The local agent is the instrumentality through which the fire company secures its business. Nearly every agent represents several companies, distributing his business among them according to his own inclination; hence the instrumentality is a divided one. In every agency there is a constant rivalry among the companies to secure a preference in the amount and quality of the risks distributed. This produces two distinct phases of competition—the competition among the companies in each agency, and the competition among agents themselves in soliciting business from the public.

The competition among companies manifests itself largely in the commission each allows to its agent. Other things being equal, the company paying the largest commission has the same advantage enjoyed by the agent who offers to his patrons the lowest rates. To place all interests on a fair footing, two tariffs are necessary—a *commission tariff* for the companies, and a *rate tariff* for agents.

For many years the associated companies have borne the responsibility of maintaining the rate tariffs, with-

out which agents could not transact business. Meanwhile, these companies have steadfastly adhered to the principle that a commission tariff is no less essential than a rate tariff. This commission tariff in the past has been very simple. It has recognized the fact that all classes of property as well as all individuals were entitled to like treatment, and that discrimination could be avoided only by distributing the average expense ratio equally among property classes. To do this, it was necessary to adhere to one rate of commission. Upon this logical theory, the associated companies for twenty years have adhered to a uniform commission of fifteen per cent; but by a singular inconsistency agents who universally recognize the necessity for rate tariffs for their own use and behoof, do not universally recognize that, for precisely the same reasons, a commission tariff is indispensable to the companies. This prejudice against a commission tariff arises largely from the fact that at all times there have been more companies outside than inside of company associations. These outside companies have always been ready to pay higher commissions than the associated companies for the privilege of first choice in the selection of risks.

For several years companies of both classes were freely represented in the same agencies, but the seductive influence of high commissions caused a discrimination against the fifteen-per-cent companies so widespread that about twelve years ago they formulated a written commission agreement, and gave agents the option of signing it as a condition of their remaining in their agencies. This agreement pledged agents not to receive over fifteen per cent commission from any company.

To one unfamiliar with the facts, it may seem surpris-

ing that agents did not surrender their fifteen-per-cent companies; but as a matter of fact, these companies had always carried the large line manufacturing and mercantile risks, and agents parting with them would have been left without facilities for insuring the business which produced the larger share of their income. Another powerful inducement to retain their fifteen-per-cent companies lay in the fact that because of their character and reputation, their presence in an agency was necessary to command public confidence.

The pledge was intended to make each agency a sort of democracy where every company enjoyed equal rights, but the independent companies had enjoyed exceptional privileges too long to be satisfied with equal rights. In some states they succeeded in procuring the enactment of laws prohibiting agreements among companies regarding agents' commissions; elsewhere their only resource was to persuade agents to violate their written pledge, and for twelve years these companies have persistently sought to accomplish this end. No stone was left unturned in the effort to persuade agents that the pledge was arbitrary and unjust, and that it robbed them of their liberties. No agent was free from the persistent efforts of these companies to induce him to violate his word of honor. It speaks well for the average probity of agents that so many of them remained faithful to their pledge; but truth compels the admission that hundreds of agents signed the pledge with the deliberate intention of ignoring its conditions. It was galling to the pride of some agents that they were compelled to sign a pledge, and it was additionally galling to those who honestly observed it throughout to know that their rivals were reaping the

benefits of ignoring its requirements. In towns where there was only preferred business, the fifteen-per-cent companies were practically crowded out.

At the present time, outside of purely local and mutual companies, there are about one hundred and eighty companies competing for the patronage of agents. These companies are numerically about equally divided between associated and independent, say ninety of each, native and foreign. Financially considered, the associated companies are much the stronger, there being no record of a single dollar lost to a policy holder in the United States by the failure of an associated company in twenty years. On the other hand, while there are some strong independent companies, the majority of them are the reverse, and in accepting a policy of one of these companies, every policy holder is put upon inquiry to ascertain its financial standing; for this reason, many people prefer the policies of associated companies, and on this account some agents have retained one or more of these companies for appearance' sake, or for the purpose of writing risks declined by their high-commission companies.

This sifting process of inferior business to superior companies and superior business to inferior companies had gone on in one form or another for over twenty years, until the fifteen-per-cent companies found themselves practically ostracized in hundreds of towns and thousands of agencies.

A recent compilation shows that, notwithstanding their higher expense ratio, the net underwriting profits of the independent companies during the past ten years were more than twice the profits of the fifteen-per-cent companies, while the difference in loss ratio in their favor was

about four times the aggregate net underwriting profits of all companies. When a number of these high-commission companies were represented by the same agent, they were compelled to bid against each other, the choice of risks going, like pews at church auctions, to the highest bidder; hence it was plainly to their interest to avoid each other in the same agencies. Like porcupines, they could not come close together without pricking each other. This created a constant pressure on the part of these companies to ensconce themselves among their fifteen-per-cent competitors. Some of them made a practice of consulting the record of agency appointments in the State Insurance Departments, and when a fifteen-per-cent company established a new agency it was reasonably sure within a few months to have a twenty-five-per-cent "bedfellow" to disturb its repose. If an agent demurred, there was not infrequently a threat, implied or direct, that if he refused to admit one of these Uitlanders into his agency he ran the chance of having a competing agency established which would make mince-meat of his established business. Timid agents generally succumbed to this *argumentum ad crumenam*, and it is no uncommon thing for agents to concede that they admitted these interlopers into their agencies, and still retain them in order to prevent them from going out and ruining their business.

The hopelessness of adhering to a commission of fifteen per cent in the face of a competition composed in about equal parts of subornation and blackmail, finally compelled the tariff companies to adopt a graded commission tariff of fifteen, twenty, and twenty-five per cent, which they now allow to agents who are willing to give them the

benefit of their exclusive services. These graded commissions are now allowed by the association companies in about twenty states and territories, agents having the option of accepting these commissions or continuing to represent companies of both classes on the former basis of fifteen per cent.

No intelligent underwriter would attempt to justify the new commission tariff except as a measure of expediency, for it not only ensures a loss on underwriting at present rates, but is a departure from the sound underwriting principle that every property class is entitled to the same expense ratio. From the standpoint of sound underwriting, the new commission tariff is unjustifiable, but as a competitive measure it was a last resort. The associated companies had the alternative presented to them, on the one hand of giving up all further attempts at organized co-operation, of throwing away the invaluable data accumulated during a generation, and abandoning thousands of local agents to the chaotic conditions of a general rate war, or on the other hand of maintaining organization, and thus shielding their agents from certain ruin, by assuming the loss on underwriting which the new commissions ensure at present rates. The result to agents is an increase of income in lieu of the destruction of their business. The result to the companies will be either a slow but sure depletion of assets in lieu of a life-and-death struggle for existence, or an advance in rates.

The public has always complained of the unreasonable expense ratio of fire insurance. The new commission tariff forced upon the tariff companies by their high-commission competitors will increase this expense, and this

increase entails an inevitable advance in rates, for capital will not long remain in the business in the face of certain loss.

A candid consideration of these facts leaves room for no other inference than that the influence of the high-commission companies constantly tends to enhance the expense ratio of which the public complains, and that this increase necessitates higher rates; but the direct increase in expense is insignificant when compared with the increase in losses which may be expected from the unwholesome influence of high commissions.

The widespread public interest shown concerning fire rates, compared with the general apathy concerning the commissions paid to agents, affords another illustration which might be appropriately added to the chapter on "The Paradoxes of Fire Insurance." When a rate is unjust to an individual, the harm stops there—no one else is wronged; but the commission paid to agents contains an immeasurable latent energy, which may exhibit itself in an increase of rates from one end of the country to the other. There is no function incident to modern civilization in which public interests are more closely implicated than the function of the fire insurance agent, and no quasi-public servant who is so dangerously free from personal responsibility. The railroad engineer holds the lives of a train-load of people in his hands; he is not permitted to practice his vocation until he has passed a rigid examination as to his competency and character; if he blunders he is held personally accountable for any failure in the discharge of his duty. The fire insurance agent is not required to submit to an examination as to his mental or moral fitness, but he may issue a contract

that will be the direct cause of a criminal intent which may result more disastrously to life and property than a hundred railway accidents. The railway engineer has no motive to be criminally reckless; on the contrary, his life, limb, reputation, and income depend upon the faithful discharge of his duty, but the law holds him to a strict reckoning. On the other hand, the fire agent is offered a bounty for criminal recklessness. He commits an act which results in crime and disaster, and the law not only exonerates him from all responsibility, but encourages the fire insurance companies to offer the temptation which creates an annual destruction of life and property compared with which the loss from railway disasters is insignificant. If the statistical estimates of fires originating from moral hazard are within gunshot of the truth, the American people pay from twenty to forty million dollars per annum for fires resulting in no small part from ignorance or criminal carelessness of fire insurance agents. The temptation which creates this carelessness is the commission paid without regard to the character of the services, and the measure of this temptation is the size of the commission.

As stated, two tariffs are essential in fire insurance—the tariff of rates to regulate competition among agents, and the tariff of commissions to regulate competition among companies. If we except the few irresponsible concerns known as “wild cats,” which are willing to accept any rate and pay any commission, but which do not pay losses, it may be stated without reservation that there are no non-tariff companies so far as rates are concerned. All companies use rating tariffs, either openly as their own property or surreptitiously as borrowed or

stolen property. The difference between the so-called tariff and non-tariff company is the difference between the man who owns a library and the person who appropriates his books and fails to return them. Both read, both receive possibly equal intellectual benefit from their reading; the only difference is ethical or moral, one or both. Ethics and morals aside, the difference between the tariff and non-tariff companies exists largely in the fact that the former observe a commission tariff; the latter do not.

The observance of the rate tariff rests with the local agents themselves, and every intelligent agent has been educated into an appreciation of the fact that when a rate is cut, there is a reasonable certainty of trouble which may result in a ruinous local rate war. While there is always more or less secret rate-cutting, public sentiment among agents ostracizes the chronic rate-cutter, and as a rule his days are few and full of trouble, for he is not popular with agents or companies. It is a maxim of the industry that any fool can get business by cutting rates. Non-tariff companies are more dependent upon established rates than the tariff companies themselves, for they cannot afford to pay high commissions and cut rates at the same time, though being free from all obligation, they may wink at or even encourage an agent who surreptitiously shades the rate or rebates his commission in order to obtain an especially desirable risk.

The local tariff is primarily the instrumentality of agents. It cannot be maintained without their consent, and cannot be violated except by themselves. The friction generated by personal rivalry among agents causes a

certain amount of tariff violation, which most frequently exhibits itself in the secret cutting of a rate, or in the rebating of commissions on some prominent risk for which there is especially active competition. At times this rivalry breaks out in a local rate war, which may extend to the entire business of a town, or, very rarely, spread over an entire state. There is more rate-cutting among tariff companies themselves than among the non-tariff companies, for the reason that the severest local competition is nearly always for some large line risk which the latter do not write. The non-tariff companies seek to get the pick of the business through high commissions, and not through competitive rates, as is generally supposed.

The high-commission companies are indifferent as to the rates on the classes they do not write, but their influence in upholding rates upon the few classes they do write is uniformly supplemented by the influence of the agents whom they have corrupted by high commissions. This reciprocal influence is productive of some peculiar results.

Let us assume that the dwelling class has been uniformly profitable, and the flouring-mill class unprofitable. If there is to be a reduction in rates, consistency would dictate that dwellings should be reduced rather than flouring-mills; in fact, logically, dwellings should be reduced and flouring-mills advanced, but dwellings pay the agents say twenty-five per cent, and flouring-mills only fifteen per cent, and in numberless cases a majority of the agents in a town or city have strenuously opposed a reduction in dwelling rates, while perhaps urging a reduction in the

rates of large line risks belonging to classes admittedly unprofitable. This is notable in the large cities where rates have always been controlled by the local agents.

Rates on preferred classes in some of these cities have been kept so high that commissions have been freely paid ranging from twenty-five to even forty per cent for these classes, because they could be written at a profit at these extravagant commissions. Paradoxical as it may seem, the most earnest efforts to reduce these rates have invariably emanated from the low-commission companies and their agents, and every failure in an effort of this sort has resulted from the antagonism of the high-commission companies and their agents.

Neither rates nor commissions can be intelligently judged except by property classes.

Profitable classes justify high commissions—unprofitable classes do not, hence profitable classes and high-commission classes are synonymous, and are generally referred to as “preferred classes.” If rate reductions are made, the reduction should be made on preferred classes; but these classes are largely absorbed by the high-commission companies, in fact would be monopolized by them but for the agents who have remained true to their fifteen-per-cent pledge.

Self-interest prompts high-commission companies and their agents to resist every effort to reduce rates on preferred classes. In this way, high commissions exert a constant influence antagonistic to rate reductions *on the only classes entitled to a reduction.*

The local agent should be a trusted adviser and guide in all matters affecting the safety of his community from conflagrations; but the fact that each agent's income is

dependent upon his commissions offers a constant temptation to secure his reward and let the public and companies take care of themselves. This temptation encourages him to wink at over-insurance on the part of people of doubtful standing; it leads him to insure unprofitable property that would be a good sale to an insurance company; it makes him indifferent to the dangerous features of hazard that may threaten an entire block or city; it causes him to ignore the storage of dangerous substances, to close his eyes to faulty construction; in fine, it causes him "to do the things he should not do, and to leave undone the things he should do"; and these sins of omission and commission not infrequently change him from a conservator of public interests into a malign influence hardly less dangerous to public safety than if he were actually criminal. The average local agent is no better and no worse than the average citizen, but he belongs to the *genus homo* and high commission is the siren that lures him into forgetfulness of his duty.

Cut rates benefit an individual (usually a wealthy property owner, corporation, or trust) at the expense of the community. A rate war in a town or city helps nobody outside the locality of the fight, but on the other hand, increases the cost ratio of the business at large from which rates are ultimately determined; the town where the war occurs gains a temporary advantage, and the community at large "pays the freight."

In the beginnings of the industry, before any fixed principles of conduct had been established, as in every primitive civilization, every man's hand was against his fellow—war was the first duty. But in the present day and generation, the code of underwriting ethics is as well

defined as the rules of deportment in social life, and neither the industry nor society at large has anything to gain from the man or company who takes and gives nothing in return, who does that which, if done by all, would bring down the whole fabric of the industry in common ruin.

There be men, faultless in their domestic and social relations, who have no higher conception of business life than to regard it as a state of predatory warfare. These men, who look upon the scalping or tomahawking of a business rival with the relish of an Apache, are examples of lop-sided evolution. Educated, on their domestic and social side, into the habits of nineteenth-century civilization, they still linger, on their business side, in the dark and bloody age of the scalping-knife and war-dance.

Fire insurance has a liberal share of this sort of jug-handle development, found all along the line from the most obscure local agent to the most prominent company official—men who pray and prey; who, after family devotions and breakfast, sally forth on the warpath, and spend their business hours skulking behind stumps and rocks trying to get the drop on somebody. These men take a savage's pride in their prowess, reciting their exploits with the demoniac glee of an Apache warrior; and the uneducated public sentiment, which judges everything by the superficial appearances which frequently make the straight appear to be crooked and the crooked straight, looks on in silent approbation.

From the standpoint of logic, and in the light of experience, the methods of the so-called non-tariff companies (which in substance are non-tariff as to commissions only) are inimical to public welfare. These companies

claim to be anti-trust, when in fact they are simply anti-system, or more properly, they live upon the system established by others. There is no record of their ever being able to act in concert in the most insignificant feature of policy or comity—not even in making common cause against the associated companies, for they look upon these companies, not as their enemy, but as their legitimate prey.

All life that sucks its vitality from other life without rendering an equivalent is parasitic, and the community has nothing to gain by encouraging parasitism on or in any of its parts. The parasite of any vocation is in secondary degree a parasite of the great body politic of which the vocation is a part. In its economic relations to the industry and the public, the company without a rate or commission tariff is comparable to a certain nocturnal insect in its relations to domestic life—without loves or hates; it is an emotionless appetite that works most effectively under cover and in the dark.

Possibilities of a Fire Insurance Trust

"He arrests him on it, and follows close the right of the statute, to make him an example."

The word "trust" has come into general use to signify any device through which, either by agreement, pool; or consolidation, prices may be controlled and competition restrained. The fact that manufacturing, transportation, newspapers, doctors, lawyers, mechanics, laborers, every branch of insurance,—in fact, every prominent industry,—is regulated by some code of ethical rules for the repression of selfishness and the encouragement of mutual helpfulness, gives evidence of the necessity for such arrangement; and the fact that these associations or guilds have continuously existed in Europe for hundreds of years without governmental interference shows that other civilizations have long realized the truth of a saying which antedates the Christian era, "What is good for the bee is good for the swarm." Modern competition, and the mobility of capital caused by the growth of the corporate idea, make these industrial pacts more necessary than at any time in history; but the recent mania for consolidation among manufacturing industries has been seized upon by politicians as an excuse for legislative interference with fire insurance associations which are to-day exactly what they have been from the beginnings of the industry.

The tendency of politics to intermeddle with all indus-

trial treaties made it necessary for manufacturing interests to find some method of harmonious action which could not be upset by the diversified laws of forty different states. The solution of the difficulty was found through the plan of consolidation. Under this plan, one corporation buys up all competing plants outright, and places them under one management. The discovery that immunity from legislative interference could be secured in this way has brought about an industrial revolution. Within a twelvemonth nearly every important manufacturing interest in the country has coagulated into a single corporation for each industry, and the world stands amazed at this swift, noiseless, and far-reaching change, attributable in no small degree to the constant and unreasonable interference of state legislatures with agreements, which in most cases were not only innocuous, but absolutely essential to the continued existence of our industrial system. Timid people naturally look upon the situation with apprehension, and politicians are frantically seeking to cork up the genii they have let loose through their attempts to regulate the universe of human activities.

Fire insurance is neither a trust nor a consolidation; that its boards and associations which existed before our national constitution was adopted are not in restraint of trade, and do not raise prices, is shown by the fact that the lowest rates in the world are found where these associations have existed longest without legislative interference.

There are insurmountable reasons why it is, and always will be, impossible to consolidate the hundreds of individual companies that transact fire insurance into one

corporation, for there are organic differences between fire insurance and other activities which make consolidation impracticable.

While it might be possible to consolidate the *capital*, it is not possible to consolidate the *business*, of two or more companies, because the business is the property of the agent, and cannot be transferred by one company to another without the agent's consent. The interests of rival agents conflict at every turn. They are always active competitors—often personal enemies, and they will not submit to be yoked together as representatives of the same company. If there were no other obstacles, this personal factor would be a permanent estoppel to consolidation among fire companies, without a complete change in present agency system. But the road to consolidation is strewn with stumbling-blocks which it would be superfluous to point out, were it not for the fact that they explain some things necessary to a full understanding of the rating problem. The first obstacle is *publicity*.

Every company is compelled to lay its affairs open to public scrutiny. Tariffs are printed and in the hands of every local agent; the profit or loss on each year's business of every company is shown by the annual statement made by it to the authorities in each state where it transacts business. At the close of a year of unusual profits, the fact is known all over the world within sixty days. This publicity prevents any possibility of concealment of any material fact, and in this publicity the people have an absolute safeguard against monopolistic rates. There are no protective duties against the importation of fire insurance. Companies come to us freely from all parts of the world. The annual exhibit of American fire insur-

ance is watched in Europe, Asia, and Australia, where other companies stand ready to come over and set up shop whenever profits will justify it, and profits do not need to be very large to satisfy companies where interest rates are much lower than here. Under these competitive conditions the impolicy of maintaining rates so high that they act as a lodestone for competition is obvious.

There is another obscure but no less important cause which precludes the possibility of consolidation of insurance capital into a trust or agreement in restraint of trade. The original cause of every trust, either in the shape of an agreement or consolidation, is what might be termed concurrence in competition. If A manufactures hats, and B hats and umbrellas, A and B compete only in the sale of hats, and competition in the sale of hats would not necessitate any agreement as to the sale of umbrellas; their trust, or agreement, if made, would apply only to hats. For this reason, only identical industries have need to combine. Oatmeal-mills do not consolidate with flouring-mills, nor linseed-oil mills with cotton-seed oil mills. It has been shown that fire insurance throws its protection over every variety of property subject to damage from fire. Under the loosest grouping, it must protect several hundred distinct class hazards. No company insures all of these classes. Some confine their business to a single class, as say farm property, town dwellings, flouring-mills or retail lumber-yards. Some insure only sprinklered risks, and some do business exclusively in towns protected by fire departments.

Through natural selection, every company inevitably drifts into a line of specialties, which is seldom or never coincident with that of any other company. Companies

writing only flouring-mills have no need to enter into a trust with companies writing only farm property, for there is no more competition between them than between the maker of hats and the maker of umbrellas. In the same manner, companies writing many classes of risks differ widely in the selection of their business.

Every established company has its specialties on which its average cost has been below the combined average of all companies with the class. On the other hand, every established company continues to write classes on which it loses money, because its individual cost ratio is above the average of all companies writing the class; but naturally these unprofitable classes form a relatively small proportion of the entire premiums of the company, for the reason that its unfavorable experience does not enable it to write these unprofitable classes under as liberal conditions as the company that has made money out of them. This discontinuity of interest as to classes forms an insuperable obstacle to the consolidation of the diverse interests of the companies into a single corporation.

There is another reason why insurance cannot be brought into a trust. An ordinary manufacturing trust needs not only skill and capital, but the capital must be tied up in permanent buildings, franchises, etc., which in case of failure may become so much dead property. In fire insurance capital does not lose its mobility. It remains convertible capital, which can at any time be turned into cash. The law requires this. The company's assets at all times consist of cash or its equivalent, and its only liability outside of unpaid losses is for unearned premiums, for which it holds the cash, and this liability can always be disposed of by the simple process of rein-

surance in another company. No other important industry can be started or stopped with so little loss of time, or so little danger of being tied up with unsalable property; and this fact enables capital to flow into and out of fire insurance with greater promptness than perhaps in any other industry.

This instant response of competition applies especially to capital already engaged in the business, for, as before shown, competition is constantly shifting from class to class.

Every period of low cost with a given class sets many companies into active competition for the class.

This eternal vigilance of established companies in shifting from class to class, which is so unfortunate a feature of competition at the present day, is enhanced by the peculiar nature of an insurance company's expense account. The average expense of all companies doing business last year was forty per cent, the average commission being twenty per cent, the average tax three per cent, and the average underwriting profits less than two per cent. Deducting these three items, we have fifteen per cent left for fixed expense, consisting of salaries, rent, traveling expenses, advertising, etc. The fixed expense is not materially increased by an increase in the volume of business. Let us suppose a company be considering the advisability of writing breweries, on which the average cost to all companies may have been one dollar and ten cents for each dollar of premiums received. From a business standpoint the company would reason thus:

It will not require any increase in our office or field force, rent, traveling or advertising expenses, to write

breweries; in other words, our fixed expense will not be increased. This fixed expense being fifteen per cent, and the average cost of the class being only ten per cent in excess of premiums, we will have a margin of five per cent profit. On this theory many companies write classes on which the average cost is ten to fifteen per cent more than the total premiums received.

This method of reasoning, while logical from a selfish standpoint, is an injustice to the community, for it results in brewery rates being kept down below cost, while rates on other classes are maintained, and their owners compelled to make good the annual deficit on breweries. If breweries show a cost ratio of one hundred and ten cents, and churches or schools only eighty cents, it follows that our religious and educational institutions are mulcted for the benefit of the malt-liquor industry.

The influence of fixed expense does not stop with competition for property classes and individual risks, but affords an incentive for companies to continue business in states where, year after year, the losses and average expense exceed the premium receipts. It also explains why retiring companies are able to get rid of their outstanding obligations for unearned premiums, through reinsurance, and the avidity of companies generally to increase their volume of premiums, for with the increase in volume there is a corresponding decrease in the ratio of fixed expense.

Many of the phenomena of competition arise from the fixed-expense item, and there is no cause that contributes more directly to disturb the equitable distribution of rates.

In addition to this ceaseless war of capital, internal

and external, the law recognizes the transaction of fire insurance without capital. Mutual insurance alone would be a permanent estoppel to trust methods in fire insurance. There can never be a monopoly in rates so long as the law recognizes the mutual plan of insurance, and the public will patronize it. It may be claimed that mutuals do not furnish reliable indemnity, and that they almost invariably end in disastrous failure. No one familiar with the history of these concerns will dispute this, but it only affords another proof that rates are so low that skill, experience, economy in management, and sufficient capital to bridge over periods of high cost ratio are the essentials to success. If this were not so, mutual companies would surely and swiftly monopolize the fire insurance business of the country.

Interstate Nature of Fire Insurance

"Let no pent-up Utica confine our powers,
But the whole boundless continent be ours."

If the framers of our national constitution could have foreseen the growth and future extent of fire insurance, without doubt they would have placed it under national control along with interstate commerce, for no branch of commerce is so fundamentally interstate in its nature as fire insurance. The very rates upon which it subsists must be established, not upon the experience of one state, but upon the average of all states. The stockholders may live in one state, the company be chartered in another state, the agent live in another state, and the risk be located in another, or possibly several states. Sometimes property insured under one policy is situated in every state in the Union. Again, the property may be in transit, and during the life of the policy pass through a dozen different states.

Not only the stability of the fire company, but the security of its patrons, requires that its business be dispersed in small, scattered lines. It is possible to conceive of one company issuing policies to cover all the property of New York City, Chicago, or any other large city, but with all its eggs in one basket, its policy holders would have no security in the event of a sweeping conflagration. The New York fire of 1845 bankrupted twenty-three local companies. The Chicago conflagration of 1871 swamped

nineteen Chicago companies, and the Boston fire, the next year, closed the doors of twenty-three Boston companies. No company confining its business to a single city can offer reliable indemnity to its patrons, and the indemnity offered by any company that confines its business to a single state is not much better; for, to reach a volume of premiums that will bring its ratio of fixed expense within reasonable limits, the company must assume liabilities which it cannot meet in the event of a great conflagration.

From every point of view, fire insurance is interstate in its nature. Its own safety, as well as the safety of its patrons, lies in dispersion and expansion. To crib, cabin, or confine it within state boundaries is to change it from a sturdy natural growth into a sickly potted plant.

Many states seem to be trying to build up a barbed-wire trocha of legislative restrictions to exclude fire insurance companies. These restrictions in many cases are a greater injustice to the citizen than to the company. Every one of them is a restraint upon interstate commerce—every one of them an injustice to some citizen, community, or class of business. Every burden or injustice imposed upon fire insurance, directly or indirectly, is a wrong to all interests requiring its protection. In the words of the motto adopted by the labor organizations, "The injury of one is the concern of all."

The increasing difficulty of complying with these state enactments not only prevents companies from entering these states, but drives out every company with a small business, and thus tends to reduce the natural competition which it is the express object of laws to foster. A state, for instance, demands a heavy annual fee for admission

to transact business, or perhaps requires a large deposit. Necessarily, every new company is deterred from entering the state, and every company is forced out, if the size of its business will not justify the trouble and expense. Every company with a small business is forced to retire, which it does by reinsuring its outstanding risks in another company, and where there were two companies only one is left.

It is interesting to note, in this connection, that in Kansas, where the conditions of the anti-trust law as interpreted by state officials have of late years made the transaction of business difficult, only fifty-nine companies remain out of a total of one hundred and forty-four entered during the nineteen-year period ending January 1, 1899. In New Mexico, where the total volume of business is small, a deposit law requires each company to deposit ten thousand dollars, and only thirty-five companies remain out of a total of eighty-five. In California, where a rate war recently occurred, only eighty-two companies remain out of a total of two hundred and eleven.

The Valued-Policy Law; or, The Reincarnation of the Thug.

“ 'Tis but the same rehearsal of the past,
And History, with all her volumes vast,
Hath but one page.”

At the beginning of the present century a religious sect existed in the East Indies, governed by a creed which made assassination for gain a religious duty, a holy and honorable profession. This sect had existed for over a thousand years, and for ages was unmolested by the native rulers; paying taxes for the privilege of practicing its bloody rites until finally suppressed by the British government in 1834.

The Indian Thug committed robbery and murder by stealth to earn the reward of Paradise offered by the laws of his creed.

The American fire-bug commits arson and murder by stealth to earn the financial reward offered by the laws of his country.

The slight difference between the Thug and Bug is in name alone.

Exactly forty years after the Thug was suppressed in the East Indies, he was reincarnated under his modern name in the good state of Wisconsin, by the enactment of a statute, since known as the valued-policy law, which declared that whenever an insured building should be totally

destroyed by fire, the amount of insurance in force should be taken as conclusive evidence of the true value of the property, and the true amount of the loss or damage, regardless of the actual value of the property. In 1879 this law spread into Ohio, Missouri, and Texas, and is now in force in twenty-one states.*

The law changes a contract to make good the actual loss by fire into a plain bet (with average odds of one hundred to one in favor of the assured) that his property will not burn within a stated time. With such odds, a bet on almost any future event beyond the control of either party would find many takers; but when a man carries the keys of his own house in his pocket, and the event is wholly under his control, it is not surprising that legalized wagers of this sort should come to be popularly regarded as "a cinch."

In any event, a law which puts it in the power of the average man to strike a bonanza of this sort with a lucifer match must occasionally tempt some one to strike, for "oft the sight of means to do ill deeds makes ill deeds done."

At current dwelling rates, if one policy holder out of five hundred is tempted by this law to burn his property, it doubles the cost of insurance for the remaining four hundred and ninety-nine policy holders; if only one man in two thousand is so tempted, it increases the cost twenty-five per cent for the remaining nineteen hundred and ninety-nine policy holders.

* At the present time, the valued-policy law appears upon the statute books of the following states: Arkansas, California, Delaware, Florida, Georgia, Iowa, Kansas, Kentucky, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, Ohio, Oklahoma, Oregon, South Carolina, Texas, Washington, West Virginia, and Wisconsin.

That the law has raised the aggregate cost of fire insurance to the American people; that it is the direct cause of an untold amount of arson, perjury, and murder,—no one familiar with fire statistics can for an instant doubt. The dangers of the law to life, property, and morals have repeatedly been pointed out by state officials. During the past year, on the ground that it offered an incentive to crime, the law was vetoed by the governors of Colorado, Nevada, and Utah, and the governor of West Virginia refused his signature. In his last annual report, the insurance commissioner of Ohio published statistics showing the increase in fire losses in that state since the enactment of the law, and ends with the following comment:

"I have no hesitancy in believing that over-insurance, sanctioned and encouraged by the valued-policy law, is the cause of the greater portion of this increased fire waste, and that this unnecessary waste will continue and grow worse so long as this statute remains a part of our insurance code."

The state insurance commissioner of Michigan, in his last annual report, condemns the law in language equally strong, and estimates the losses from moral hazard, arising from over-insurance in his state, at twenty-five per cent of the aggregate fire waste; in other words, that incendiarism is the cause of one fire out of every four.

The long law-sanctioned reign of Thuggee in India seems incredible to American intelligence, yet American legislation has unchained an influence no less destructive to life, property, and morals. The Thug needed for his work at least a modicum of physical courage; the fire-bug does not. The Thug cut his victims' throats with neatness and dispatch, one at a time; the bug subjects his victims,

regardless of age or sex, to the slow tortures of fire, a houseful of people at a time.*

The Thug emptied the contents of his victims' pockets into his own; there was simply a change of ownership; the money was not taken out of circulation; society was not impoverished; the bug destroys values, turns property into ashes, and the money he acquires through his nefarious deed is taken from the contribution-box of society at large. From a financial standpoint the Thug represented exchange, the bug stands for waste, havoc, wanton destruction. The Thug sinned against ethics; the bug sins against ethics and economics.

But how did this legislative lunacy known as the valued-policy law come into being in an enlightened age and country? What was its genesis? Everything must have a cause. If it were possible to go back through the mists of antiquity, it would doubtless be found that there was some apparently logical reason for the birth of Thuggism, some fancied wrong to be righted.

The law enacted in Wisconsin in 1874, and since that time by twenty other states, was originally intended to right an existing wrong, and the history of valued-policy legislation throws an instructive side-light upon the otherwise unaccountable antagonism of legislation to the industry of fire insurance in all states dominated by the farmers' vote.

Thirty years ago farm property formed a much larger

* A man was recently convicted of arson in the criminal courts of Chicago, through evidence which showed that *the gasoline can used to fire the building was borrowed from a woman living in the upper story of the building.* The woman who loaned the can, and her family, five in all, were rescued from the flames with the utmost difficulty.

The annals of fire underwriting afford innumerable proofs of the fact that an incendiary is not deterred from his crime by any consideration of the possible consequences to human life.

proportion of our aggregate national wealth than it does to-day. At that time the tremendous growth of our manufacturing and transportation facilities, and the concentration of population in our cities, was just beginning. The fire companies were then deriving a steady revenue from the insurance of farm property, which as a class was considered doubly desirable, because it had been steadily profitable, and because it was free from the dangers of sweeping conflagrations which in every city jeopardized the entire assets of a company.

Every company wrote farm business freely through its local agents, under the same liberal conditions as other classes of property. The volume of farm business and its exceptional desirability led some managerial genius to conceive the idea that he could largely increase the premiums of his company from this source by sending out traveling solicitors through the country districts, after the manner of the lightning-rod, chain-pump, and patent-churn people. As these solicitors were selected for their glibness and push, rather than for their character or knowledge of the business, and as neither their judgment nor honesty could be trusted, the plan was adopted of taking payment in notes instead of cash. An elaborate application containing a cutthroat warranty was prepared, under which the assured surrendered every equitable right, and became responsible for any over-valuation of his property; and to make assurance doubly sure, every policy contained a printed stipulation that the company should be liable for only three-fourths of any loss that might occur. This plan relieved the company of any necessity for the services of local agents, selected for their honesty and skill. There was no cash to handle;

no danger of defalcations, and (with a policy condition which compelled the assured to carry one-fourth of the insurance for which he had paid) no danger from over-insurance. Under this jug-handle arrangement, it became possible to sell fire indemnity, like tinware, by peddling.

The farmer is generally ready to purchase anything he can pay for with a note, and as "a business getter" the plan was a success. In a few years the agricultural regions swarmed with traveling solicitors ready to sell a farmer a patent churn, windmill, stump-puller, or fire policy with the same glib disregard of the truth. These tramp solicitors were, as a rule, ignorant, unscrupulous adventurers. They were paid by a percentage of the premiums, and it was, of course, to their interest to make as large a sale of indemnity to every buyer as possible, regardless of his actual needs. The companies themselves could afford to be indifferent to the amount of insurance a man procured, as misrepresentations in application could be used to deny liability, and in any event, the assured could not collect more than three-fourths of his actual loss. In time, the adjustment of losses revealed the full iniquity of this plan, and in every farming community fire insurance came to be regarded as a swindle. Of the hundreds of fire institutions then doing business, not over four or five at most were implicated. Nineteen companies out of twenty vainly protested at the buccaneering methods of these so-called farm companies, believing they would bring the entire business into reproach and subject it to inimical legislation. These apprehensions were well founded. The industry of fire insurance became *non grata* in every state

where the farmers had the controlling voice in legislation, and the entire insurance community has been made to suffer ever since for the sins of a few unprincipled adventurers.

The American farmer to-day is the hereditary foe-man of fire insurance; he makes no distinction between companies on account of character, record, or methods; in the words of a popular song, "All coons look alike" to him; the few companies whose solicitors he learned to distrust in the palmy days of farm insurance are typical of the whole body of fire underwriters. In his ignorance of the facts, the readiest remedy that occurred to the agriculturist was to wipe out the whole iniquity with a sweeping law which required that the amount of insurance should be taken as the real value and measure of loss, regardless of policy conditions or actual loss. The offer of a reward to any one sharp enough to swindle an insurance company was a practical application of the maxim, "Set a thief to catch a thief"; but in resorting to this crude remedy the farmers forgot to consider the possible consequences to either their own or other people's interests.

Probably no more absurd or dangerous means was ever devised to right a wrong, and the farmers themselves have come in for much the largest share of the evil consequences of their own hasty and ill-advised action. The valued-policy law has cost the farmers millions of dollars, to say nothing of other people. In Wisconsin, Ohio, Texas, and Missouri, where the law has been longest in force, farm rates to-day are about double what they were when the law was enacted. At that time, all companies were freely writing farm risks through their local agents under the same form of policy, and at

the same commissions that prevailed in other business. Ask any agent to-day, and he will reply that few or none of his companies will insure farm property at any price. The very companies responsible for the valued-policy law have been forced by the unprofitableness of the business, even at present high rates, to discontinue writing farm property in states where the law exists. These companies killed the goose that laid the golden egg, by creating a widespread moral hazard in a class of property that had been notably free from incendiary hazard. With an advance of about one hundred per cent in rates in valued-policy states, farm property to-day appears on the prohibited list of nineteen companies out of twenty, because losses have increased even more than rates.

This is the history of a law born of blind, unreasoning greed on the one hand, and blind, unreasoning resentment on the other.

These conditions are the results of *open competition*. If farm business had been under the control of tariff associations, the united intelligence and honesty of fire underwriters would have scotched the disreputable scheme that generated an equally disreputable law.

In states where the law has not already been enacted it is regularly introduced each session of the legislature and voted for by the country members. If asked why, the invariable answer is, that insurance companies systematically encourage people to buy fire indemnity in excess of what they need; in other words, that they take money for which they render no equivalent. This is the stereotyped argument urged in state legislative halls year after year. To say nothing of the poverty of invention that can devise no remedy for an evil except to create a

thousandfold greater evil, that can devise no penalty for a few minor evil-doers except to create thousands of criminals, whose crime has been held under every civilization to be worthy of the death penalty, what shall we say to the legislative inconsistency that imposes a penalty for an offense which is common to every walk of life, even to the law-making power that enacts valued-policy laws? During the past ten years the several states have collected from the fire insurance companies \$31,488,749 in taxes. These taxes were paid in good faith, on the implied guaranty of protection against the competition of unadmitted companies. But the states have not furnished the protection. Unadmitted companies are in constant competition for important risks everywhere. The country is deluged with their advertisements. Their solicitors and adjusters transact business, regardless of state taxes and state requirements, and in some cases court the attention of the authorities, even boasting that the state officials dare not arrest them. Many of the largest risks in every state are written in these unauthorized concerns, which do not pay a penny of tax to the state. Consistency to the principle enunciated by the valued-policy law would compel the states to refund the premiums the admitted companies have lost through their failure to perform an implied contract for which they have received the munificent consideration of over three million dollars per annum.

In every legislature there is a liberal sprinkling, often a majority, of lawyers. In every case one side must be defeated, and it is safe to assume that in nine cases out of ten the defeated litigant acted upon the advice of his attorney. A client may be led through a labyrinth of demurrers, appeals, and reversals by his attorney, to learn

that the court costs are one hundred and fifty dollars, and that he is not entitled to damages of ten dollars from the neighbor who shot his dog, but the lawyer's fees run on like the relentless gas-meter; and when the courts adjourn the lawyer pockets his fees, and as like as not hurries off to the legislature with a valued-policy bill in his valise, not against attorney's fees, but against fire insurance companies.

A recent compilation shows that out of 15,364 appealed cases, 5,841, or nearly forty per cent, were reversed. Most of these cases were reversed upon some question of procedure. These facts show that all the judges are wrong about half the time, or half the judges wrong all the time, whereas all the judges collect all their salary all the time. For an error, jointly made by an agent and a policy holder in estimating what a certain building will be worth one, three or five years hence, the valued-policy laws require his honor to impose a fine upon the stockholders in some distant state who never heard of the building, the owner, the agent, or the transaction, and the law hands this fine over to the informant, without whose connivance the offense could not have been committed.

Eminent physicians have repeatedly admitted that the doctors destroy more lives than war, pestilence, and famine combined; but there is no valued-policy law applicable to the medical fraternity.

The universities take our boys on contract that they will give them a liberal education for a liberal consideration. At the end of four years the boys are sent home with a sheepskin, a pigskin, a college yell, a cigarette habit, an impaired kidney, and a mandolin, to take up the serious duties of life; and there is no valued-policy

law to compel Alma Mater to reinstate the raw material she has spoiled.

It may be claimed that these illustrations constitute a *non-sequitur*—that they are flippant, irrelevant, and illogical, but they are precisely the line of argument advanced in the legislative halls of nearly every state of the Union for the past quarter of a century in favor of a valued-policy law which reverses every established principle of ethics.

A man may buy more cloth for a garment than he needs, and the surplus goes to waste. He may buy so many potatoes or cabbages that they will decay before he can use them. He may order more dinner at a restaurant than his stomach will hold. In a thousand and one ways he is liable to buy in excess of his actual needs, just as he is liable to buy fire indemnity in excess of the value of his property; for this value is fluctuating and always a difficult thing to determine.

All this on the assumption that the companies are guilty, as charged, of systematically encouraging over-insurance, but this is an unwarranted assumption. The presumption of a motive is necessary to establish guilt, and with every intelligently managed company the motive is not only lacking, but on the contrary, is directly antagonistic to over-insurance. Even the few companies responsible for the iniquities of farm insurance could not afford to encourage over-insurance; for despite the protection of their scheme they could gain nothing from the creation of a moral hazard. If lacking with these companies, it may be said that the motive with every other company was, is, and always will be overwhelmingly against over-insurance.

It is the first aim of every intelligent management to avoid moral hazard. The avoidance of this hazard constitutes the difference between the prosperous and unprosperous company. No rate offers the slightest temptation to accept a risk when it is known that the assured will profit by a fire. An examination of the files of any prominent company will show that more correspondence arises in the effort to keep the amount of insurance well under actual value than from any other cause.

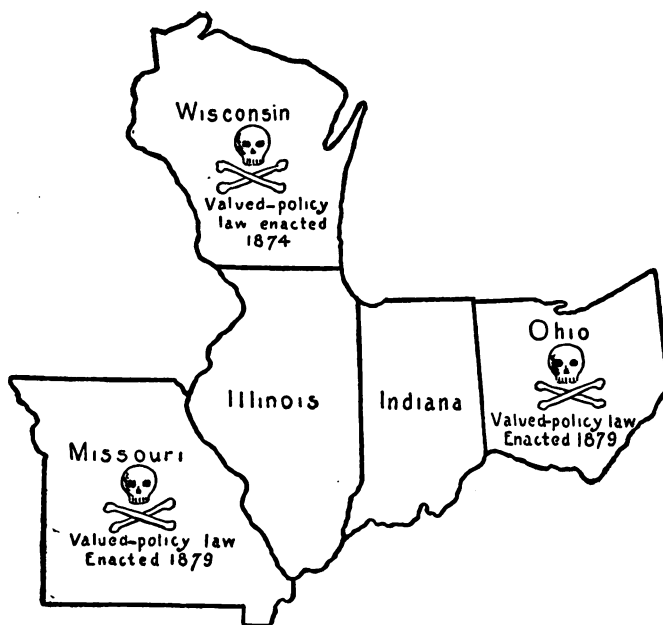
Companies transacting business through local agents have no means of learning the values of property except through their agents, and it is safe to say that no reputable company ever insured property for more than it was worth, except upon the verbal or written misrepresentation of the agent or the owner.

The valued-policy law has done more execution at the breech than at the muzzle—

“As some muskets so contrive it
To often miss the mark they drive at,
And though well aimed at duck or plover,
Bear wide, and kick their owners over.”

The farmers who originated the law, and who for twenty-five years have stuck to it as a fetich, are, without knowing it, its chief victims.

All in all, the valued-policy law is a repulsive thing, that corrupts individual character and engenders social putrefaction. It is the dark, subtle terror of Thuggee reincarnated, and no man's life, property, or loved ones are immune to its sinister and far-reaching influence. It is a *burning* shame to American civilization.



Who Pays the Piper?

The five states of Ohio, Indiana, Illinois, Wisconsin and Missouri form what might be called a geographical triangle. The two states in the center of this triangle (Indiana and Illinois) have never enacted the valued-policy law. Fire insurance rates on farm property in these two states have remained practically stationary for twenty-five years. On the other hand, the three states at the corners of the triangle (Ohio, Wisconsin and Missouri) were the first to enact the law, which has now been in force in these states over twenty years. *In each of these three states farm rates have advanced 100 per cent since the law was enacted.*

Attention was called to this remarkable fact in an address delivered before the Fire Underwriters' Association of the Northwest in 1896. Any mathematician would readily concede that under the law of probabilities, this fact could not be the result of chance, neither can it be the result of retaliation on the part of the insurance companies, for the loss ratio on farm property in these states has increased so much faster than rates that nearly every prominent company has been forced to discontinue the insurance of farm property in these and all other valued-policy states. It may be assumed as an axiom that fire insurance companies do not voluntarily desert profitable classes.

The statement in the address referred to was made after an exhaustive examination of old records and tariffs, but at best it was an *ex parte* statement which lacked official confirmation. This confirmation has at last come in unequivocal language from a source so high and so disinterested as to challenge public attention.

During the last session of the Iowa legislature the valued-policy bill was introduced and referred to the committees on insurance of the Senate and the House. The Senate committee reported adversely, and it was never considered by the House committee, but during the closing hours of the session, the bill was called up and passed in spite of the adverse report of Senate committee. Before attaching his signature, the governor adopted the sensible plan of investigating the results of the valued-policy law in the neighboring state of Missouri, where it had been in force over twenty years. Iowa officials traveled through the bordering counties of the two states and procured a large number of sworn statements, with an itemized record of over eight hundred policies collected in the

northern tier of counties in Missouri and the southern tier of counties in Iowa.

The veto message of Governor Shaw, which constitutes the most important contribution to valued-policy literature, appears in the appendix to this work, where it may be consulted by those who are interested in the subject. Appended to this message is an itemized list of policies examined, with a summary of sworn statements from a large number of prominent citizens of Missouri, which agree in the uniform statement that while rates on all classes of property have steadily advanced under the valued-policy law, farm rates have advanced on an average 100 per cent, and that rates on corresponding property range from 50 to 100 per cent higher in Missouri than in Iowa. These statements reach their close and climax with the affidavit of Frank Hooker, cashier of the First National Bank of Blanchard, Page County, Iowa, *stating that the main street of the town is on the boundary line between Missouri and Iowa, and that rates on the Missouri side of the street are two and a half times as much as those on the Iowa side of the street.*

So far as the state of Missouri is concerned, Governor Shaw's message absolutely confirms the statement made in the address before the Northwestern Association of Fire Underwriters, and he adds that through correspondence it was ascertained that the valued-policy law in Wisconsin had produced similar results. There is no doubt that a like investigation would prove beyond controversy that farm rates have advanced in every state where the valued-policy law is in force. There is no room to doubt that this investigation would show that in each of the other states where it has been longest in force

(Ohio, Wisconsin and Texas) farm rates have doubled since the law went into effect, and as before stated, that the losses on this class have more than doubled. It may be added that this investigation would further disclose the fact that rates on other classes of property have similarly advanced, but from the fact that exposure and occupancy of town property are constantly changing it is difficult to institute comparisons between identical risks. On the other hand, as the exposure and occupancy of farm property do not change, it is possible to establish an absolutely reliable comparison between the rates of twenty years ago and the rates of to-day on identical property.

The facts set forth by Governor Shaw, together with the testimony of other state officials in valued-policy states, which he quotes, make his veto message one of the most important gubernatorial documents ever issued. No sane man can read this message and resist the conviction that the valued-policy law is an expensive luxury to the community, and especially to the farmers who, in large measure, pay the piper, but this is its least offensive aspect. Under the farm-property rates prevailing when this law was enacted, if an average of one policy-holder in two hundred has been tempted to burn his property by the inducement held out by the law, it would have made necessary the advance in rates which Governor Shaw proves has actually occurred, and the startling inquiry is forced upon us, Has this law made an incendiary of one out of every two hundred policy-holders in the states where it has had time to develop its full educational effect? One may well pause to inquire whether this law of the skull and cross-bones is not educating us into a nation of professional firebugs.

The Anti-Coinsurance Law

Being an act entitled to be called an act to provide that "to him that hath, more shall be given, and he shall have more abundance, and from him that hath not shall be taken even that which he seemeth to have."

Two vital questions confront the fire company with every policy it issues: 1. Is the property insured for too great a proportion of its value? 2. Is it insured for too small a proportion of its value?

In the first instance the owner may become indifferent to the care of his property, or even have a direct incentive to destroy it by fire.

In the second instance the company does not receive sufficient compensation for the risk it assumes, and the owner secures more indemnity than he pays for, thus obtaining an advantage over other people who pay for what they get.

The problem of securing a uniform relation between insurance and value confronts every company in the acceptance of every risk; for it is an established principle in fire underwriting that rates cannot be made intelligently and fairly except on the theory that all property is insured for about the same proportion of its value. It makes no difference what this proportion be if everybody be insured for the same proportion. If all property were insured for only one-fourth of its value, statistical experience would soon reveal the proper rate for prop-

erty insured for one-fourth value; but if one man has his property insured for one-fourth its value, and another for three-fourths, the former may receive as much indemnity in the event of partial loss as the latter, who paid three times as much for his insurance.

It is impossible for the company or its agent, or even the owner himself, to closely estimate the value of property, and even if it could be estimated, values are constantly fluctuating. The only way to adjust the matter to ensure equity to all concerned must be through a mutual agreement that if the property is not insured for a stipulated proportion of its value at the time of the fire, the assured shall be a coinsurer for the deficit.

This simple plan of adjusting a difficult problem is so fair that the use of the coinsurance clause is world-wide. In France, Italy, Spain, Portugal, Belgium, and the Rhenish Provinces, the coinsurance clause is required by law, and in other parts of Europe the agreement is invariably made a part of the policy contract.

It is singular that what is obligatory throughout Europe is prohibited in this country by law. At the present time ten prominent states of the Union forbid the use of the coinsurance clause. The only explanation ever given for this prohibition of coinsurance is that it encourages over-insurance, but many of the states, while prohibiting coinsurance on this ground, have enacted a valued-policy law which offers an incentive for people to over-insure their property. Besides, a coinsurance clause that makes the agreed proportion between the insurance and value eighty or ninety per cent does not encourage over-insurance.

Aside from the mathematical necessity for a uniform re-

lation of insurance to value in establishing equitable rates, coinsurance is the safeguard that protects small property owners from the cunning devices of large corporations in their efforts to avoid the payment of their share of the fire tax. If the facts could be once understood, there would be not only a popular demand for the repeal of all laws prohibiting coinsurance, but a demand for the enactment of the European laws which make coinsurance obligatory; because the European laws ensure a just distribution of rates, while the American laws put it in the power of the propertied interests to unload a share of their fire tax upon people of small means. The evasion of the fire tax in this way is no less notorious or unjust than the evasion of state and municipal taxes. It is difficult to make this plain to one not versed in fire insurance. In fact, the vital bearings of coinsurance on rates are not appreciated by the majority of fire underwriters. The importance of the subject, however, justifies the following explanation:

It should be borne in mind that but a small proportion of fire losses are total. Out of twenty claims made against the companies, on a low estimate nineteen are partial losses, ranging from a merely nominal damage up to the nearly full value of the property. This average of partial losses is enormously increased when the property insured is not all subject to one fire. In nearly all large wholesale and manufacturing establishments the contents are located in different compartments, which are separated by brick walls with fireproof doors and shutters over every opening. Sometimes the property is located in a number of different buildings. When a fire starts in one compartment or building, the fire department, in ninety-

nine cases out of a hundred, is able to confine it to that compartment or building, so that in establishments of this kind a total loss seldom or never occurs.

The practice in American fire underwriting, up to about fifteen years ago, was to require a specific amount of insurance upon every building, and when a building was divided by solid brick walls with fireproof doors, a separate amount of insurance was required to be placed on and in each compartment.

The reason for this was, that if the insurance were spread to cover the entire establishment in one item of insurance, the owners would need only enough insurance to cover the value in one compartment or building, as this would be enough to cover all possible loss. The equity of the regulation regarding specific insurance was so plain that large merchants and manufacturers could not reasonably object to it, and specific insurance was the rule throughout the country, but it was found that specific insurance worked an injustice to property owners in one respect. The owner knew, at least approximately, how much insurance he needed on each building; but it was impossible for him to tell how much he needed on the contents of each building. If a mercantile stock, the value in each compartment or building was constantly changing, and he could not keep his books to show the value in each compartment; if a manufacturing plant, the property in process of manufacture was constantly shifting from one part of the establishment to another, and it was impossible to estimate from the books the value of the property in any one building or compartment. Wholesale merchants and large manufacturers of all kinds began to insist that they must have their insur-

ance arranged to cover any part of their establishment where fire might occur. The companies then proposed to issue policies under a blanket form (that is, covering the entire property in one sum), provided the assured would agree to keep the property insured for eighty per cent of its value, and if the insurance at the time of the fire should be less than that proportion, the insured should be a coinsurer for the difference between the amount of insurance and eighty per cent of value. People readily accepted this equitable arrangement, which relieved them from the care of constantly watching values in each compartment to see that the insurance was adequate. In a short time blanket policies with the coinsurance clause came into general use, and all the large commercial and manufacturing establishments of the country were insured under what became known as "the blanket form, with coinsurance."

In time some schemer discovered that if he could get the coinsurance clause declared illegal, it would be possible to reduce his insurance materially, without impairing the protection afforded by his blanket policy form. To offer any bill that seems inimical to fire insurance is to ensure its enactment in many states, and the anti-coinsurance law has been spreading ever since under the active encouragement of interested property owners.

This law, coupled with the law forbidding tariff rates, creates a condition in fire insurance as absurd as if the state, which requires its tax officials to take oath that they will spread taxes equitably, should at the same time forbid them to fix a uniform tax percentage, or to establish property valuations. Under the conditions of these two laws, fire underwriters are left in a quandary similar to

that of the young lady in the song, whose mother permitted her to go swimming with the injunction that she hang her garments on a limb, and not go near the water.

The concession of blanket insurance was obtained on the condition of coinsurance; now the great trusts of the country are claiming the benefits of blanket insurance without coinsurance. Under the anti-coinsurance law there has been a constant reduction of insurance to value on every risk insured under a blanket form, and it is well within bounds to say that, in the aggregate, such risks are not insured for over forty per cent of value, and the owners are securing their fire indemnity for about half what they would have to pay for protection under a specific form, thus securing their insurance at an advantage over people of small means whose property is usually located in one building, and subject to total destruction by a single fire.

Coinsurance was not required when insuring dwellings, stores, schools, public buildings, or other similar property. There are thousands of towns throughout the country where the clause was never heard of, and where the people have no direct interest in the subject; but indirectly every small property owner is interested, because the prohibition of coinsurance benefits no one but the great concerns whose distributed property is usually located in cities, or under the protection of private fire departments. Blanket insurance enables these concerns to evade their just share of the insurance tax at the expense of the community at large, because a corresponding increase is made in the loss ratio shown by the statistics upon which rates are established.

It is proper to add that the principle of coinsurance has

always been applied to marine insurance, though the reasons are not so logical as in fire insurance, because in the marine risk the property is all exposed to loss, while in a large proportion of fire risks the property is so distributed that it is not subject to total loss. No explanation has ever been given why our laws permit the universal use of coinsurance in marine insurance while prohibiting it, with severe penalties, in fire insurance.*

*At the present time, laws forbidding the use of the coinsurance clause are in force in Georgia, Indiana, Iowa, Louisiana, Michigan, Minnesota, Missouri, Ohio, Tennessee, and Wisconsin.

Anti-Trust Laws and Open Competition

Open competition is that which every man desires on the part of every other man with whom he is not in competition.

The constituted authorities of several states—legislators, governors, judges, prosecuting attorneys, and insurance superintendents—seem to have organized themselves into a *posse comitatus* to destroy fire tariffs and rating associations, in order that the dear people may enjoy the blessings of open competition in fire insurance. Meanwhile, among the dear people, each for himself is striving, by means fair or foul, to suppress open competition in the particular thing he has to sell.

Those who have nothing to sell but day labor organize trades unions to squelch open competition in labor. When the non-union individual, known as a "scab," tries to sell his labor on the open market, he is interviewed and reasoned with through forcible language and brickbats, and when other people evince a disposition to patronize the scab, they are reasoned with through boycotts, dynamite, and other like persuasives. These missionary efforts extend beyond the people who patronize the scab to the people who patronize the people who patronize the scab.

The politician who proposes to force everybody but himself and his constituents into open competition is himself compelled to become a part of a "machine" managed by an autocrat known as "the boss," before he is permitted to market his gray matter in exchange for the

emoluments of office. Governors, legislators, and other public officials, who are so earnestly demanding open competition, have, with few exceptions, become what they are through a politicians' union which shuts out open competition from politics.

Excellent reasons have been advanced to prove that the party machine is a necessity on the ground that a directing intelligence is essential in every community animated by common sentiments and purposes; but this reason proves that this directing intelligence is as necessary to the insurance community as to the political party, and the inconsistency of the state authorities lies in the fact that they refuse to recognize that the necessity to which they all bow in politics is no less a necessity in other activities.

The politician who preaches the merits of the open competition cure-all from the street corners is not at all inclined to take his own medicine. He exhibits a discreet disinclination to force his nostrum down the throat of labor, because labor has votes. There are several monopolies in the United States from which a dozen or more controlling stockholders each receive a larger income than the entire annual underwriting profits of all the American fire insurance companies, but these people are engaged in commerce, and commerce is under the protection of the sacred palladium of our liberties, known as the Constitution of our Fathers.

On the other hand, insurance has no fathers, and no country. Like the cadaver from the poor-ward, it is meat for the scalpel of the political experimenter; a thing that may be hypnotized, galvanized, vivisected, dissected, and otherwise experimented upon by the sawbones of politics

without danger of hurting the tender sensibilities of relatives or friends.

When the times were out of joint, it was the custom among the Hebrew tribes for the priests to symbolically load a goat with the sins of the people, and then chase the animal out into the wilderness. Circumstances have made fire insurance the only available scapegoat, and because it is the one thing they can drive, the politicians propose to chase it out into the wilderness of open competition. Before this intention is carried out, it would seem more logical to inquire into the probable effects of open competition in fire insurance.

Under every aspect, the fire rate is a tax—a tax, it is true, that is purely voluntary among people who receive the benefits from its disbursement. The same may be said of postage and revenue stamps, which are not sold by open competition. It is also true that the fire tax is collected and disbursed by private corporations, instead of by the central corporation known as the government, but this does not change its nature as a tax. Taxes, public and private, must be assessed according to the benefits received by each person, and this can only be done through a tariff which contains a proper charge for each benefit. A tax is not a thing to be hawked or auctioned, but a thing to be assessed. The verb *assess* means “to set, fix, or charge a certain sum upon; to determine, ascertain, estimate, or compute.” The word is from the same root as *assize*, which signifies “anything fixed or reduced to a certainty in point of time, number, quality, weight, or measure.” There is nothing in common between the verbs *to assess* and *to compete*. They are antonyms. Competition says, “What *will* you pay?”

Anti-Trust Laws and Open Competition 129

Assessment inquires, "What *ought* you to pay?" Without destroying fixity and certainty there can be no competition in a thing that by its nature must be "fixed, or reduced to a certainty."

A tax levied by a government from an entire community is expected to be disbursed for the benefit of the community. A tax levied by private enterprise from a part of the community should be levied and disbursed without discrimination. This is the inherent immutable nature of every tax, and any law intended to compel open competition in a tax is a *reductio ad absurdum*.

The equivalent for the consideration paid in the fire tax is indemnity or a promise to make good future damages from fire to the property of the tax-payers. The laws quite properly require a standard of solvency on the part of every corporation before it is permitted to transact fire insurance, and theoretically, there is no difference in the quality of the indemnity sold by authorized companies; for the law exacts constant and detailed information as to each company's financial condition, and if not satisfactory, the company is compelled to make good any deficit or retire from business before it becomes insolvent. If all indemnity is uniform in quality it should be paid for by uniform tax assessments, graded according to the hazard assumed. Justice admits of no other course.

But, it will be claimed, this means a monopoly, for the companies can absolutely fix their own prices and shut out competition. How shut out competition? The published statements of the companies show the exact profits each year. These statements are filed in the archives of every state, and are heralded to the world by

the daily press, and are advertised widely by the companies themselves. Instead of hiding their figures the companies give them the utmost publicity, because they are the evidence of their solvency and prosperity. Unlimited capital is constantly and persistently seeking profitable employment, and the instant fire insurance offers satisfactory inducements capital hires out to it, and unlike the privileged labor unions, the unions of fire insurance cannot intimidate scab capital or its patrons with clubs, brickbats, dynamite, or boycotts.

But granting that other capital does embark in the business, it will be asked, How will this lower rates, if rates are to be regarded as a tax, and all companies compelled to maintain uniform rates? This is a logical question and demands a plain, unequivocal answer.

Every new competitor in fire insurance is another mouth to feed. Every dollar of new competing capital serves to divide up existing business. Any reduction in the premium receipts of existing companies causes a corresponding increase in the ratio of fixed expense. Companies that are making a living profit on their present receipts would lose money if these receipts were lessened to any material extent. For this reason every company is vitally interested in keeping class rates down to a point that will not encourage other capital to enter the business, and so long as the profits are kept down to a point where outside competition can find more profitable employment elsewhere, it is conclusive evidence that rates are not too high. Rate reductions made in this way to keep out competition are necessarily made impartially on the experience shown by each class. There is no chance for favoritism—every person inter-

Anti-Trust Laws and Open Competition 131

ested in the class receives his fair share of the reduction. The weapon of every monopoly is to reduce prices, not systematically, but lawlessly, having in view the value of the customer, and not the value of the thing sold. If this weapon be taken from fire insurance by forbidding the violation of established tariffs, the publicity required of the business leaves no defense against competition, except to cast out excessive profits by prompt rate reductions. This applies not only to outside capital, but to companies in the business. The constant shifting about in search of profitable classes of property would be stopped when all classes were equally profitable. The hunt for preferred risks would cease when there were no preferred risks.

With tariffs universally enforced, the published statements of the companies would reveal actual profits, and rates would be regulated by an automatic law which would ensure fair treatment to all.

On the other hand, would open competition lower fire rates and distribute the benefits of the reduction equably among policy holders?

This question opens up a wide field for surmise, for open competition in fire rates means the extrusion of known quantities from the equation, and substitution of the personal factor, which itself is the unknown quantity, the unpredictable thing of the ages.

Artemus Ward once said: "The only use there is for a monkey is to stand and watch the little cuss and wonder what he will do next." The monkey is the embodiment of activity without intelligence, an activity of apish vagaries which may range from the simply amusing to the profoundly tragic; from the decoration of the mon-

key's own dorsal region with a paint-brush to the slitting of a baby's wizen with a razor. In ordinary affairs of barter and sale, open competition is a fight in the daylight, with the sun of known cost in sight. It is possible to estimate damages and withdraw for repairs, but in fire insurance, without a ray of light as to known cost, open competition would be a struggle in Cimmerian darkness, a tragedy in which belike the entire cast might be rendered *hors de combat* and dragged out by the heels.

There are a few established facts, however, which give a clew to the possible consequences of open competition in fire rates.

1. The margin of aggregate profit in the sale of fire indemnity is so small that any material increase in cost or decrease in rates must come out of the assets of the companies.

2. Some companies have made money, some have lost; the depletion of assets will first affect the latter and gradually extend to all companies.

3. Rate reductions made through tariffs are made solely with regard to the fire hazard assumed. Rate reductions made in open competition are made solely through personal considerations.

4. Competition is in direct ratio with the commission inducement to competing agents. The agent's fixed expenses of living must be met, and business economics will compel him to direct his efforts to soliciting risks where large values are concentrated.

The first result of the abolishment of rating associations would doubtless be an increase in expenses, and demoralization in rates, as determined by the local conditions in each town. In some towns, where a personal

Anti-Trust Laws and Open Competition 133

animosity exists among agents, every consideration of self-interest would yield to the *lex talionis*; old grudges would be settled by a relentless rate war, in which indemnity would be practically given away for the longest period for which companies write (five years). These communities would enjoy the benefits of fire insurance gratis. In other towns where a decent sentiment of mutual respect exists among agents, they would, by tacit consent, refrain from soliciting the business of their rivals, and rates would remain substantially unchanged.

It is an unwritten law of ethics that the greatest deference to other people's rights is shown where the custom prevails of carrying a revolver in the hip pocket. The fact that every agent, everywhere, would be prepared to retaliate instantaneously would, in itself, exert a restraining influence on agents and companies inclined to run amuck among unarmed people; and in the smaller towns, where a personal acquaintance exists among the agents, and they not only know each other, but each other's risks, ordinary prudence would prompt caution, and in the aggregate, it is possible that the reduction in rates might not be so great as generally anticipated. But specifically, all equity among towns would be destroyed. One town would get insurance for next to nothing, because of a deadly enmity existing among agents; another town would continue to pay full rates, because the agents would refuse to do the gladiatorial act.

In cities, other conditions would control. Agents not knowing each other, or each other's risks, would be in a measure immune to the dangers of personal retaliation, and would be guided solely by self-interest. As before stated, competition would be in direct ratio to

the value of the risk. The great mercantile and manufacturing establishments would become targets for competition. Large property owners would be swamped with "inducements." The bargains in indemnity would be snapped up by the big customers, and the small fry who have to work at the desk, or counter, or in the factory, ten hours a day, and who have no leisure to shop for fire indemnity, would have to pay the same old prices.

It is not generally known that most of the great mercantile, manufacturing, and transportation corporations of the country employ expert buyers of fire indemnity, and that as fast as the manufacturing concerns scattered throughout the country concentrate into a trust, the head office of the trust is established in some commercial center. Among other methods of cutting down expenses, these trusts at once retain an expert buyer of fire insurance. The insurance of practically all of the large concerns or trusts of the country at present is looked after by a salaried employe, whose sole duty is to attend to the purchase of fire indemnity. These experts are selected for their ability, and are expected to understand all the ins and outs of maneuvering for lower rates. They know how to word policies to make the smallest amount of indemnity cover the largest amount of value. They understand the fine art of manipulating agents and managers to secure special inducements. They are able to "figure out" the largest rate concessions for the least improvement in physical hazard. In fine, they understand the art of bargain-hunting in fire indemnity, and in their specialty they are easily the superiors of fire underwriters themselves.

Anti-Trust Laws and Open Competition 135

It may be as confidently expected that open competition would be a godsend to the concentrated values—the moneyed interests—as that it would unsettle all possibility of equity among the scattered values in the smaller towns and smaller classes of risks. The trusts and corporations would secure the bargains, while the stores, shops, and homes of the people would receive no material benefits.

When we consider the effects of open competition among the companies, the first and most certain result would be an increase in expense and loss ratio. Business is secured through agents, and under open competition agents would be secured through high commissions. An immediate increase in the average commission of from five to ten per cent might be counted upon as a certainty, while with the abolishment of tariffs and all inducements for improvement in physical hazard, an indefinite increase in the loss ratio might be expected with equal certainty. Every penny of this increase in cost, as well as every penny of reduction in rates, would have to come out of the assets of the companies, and this depletion of assets would begin with the companies which have made no underwriting profit out of past rates, extending gradually to every company. It is not to be expected that stockholders would leave their money subject to certain loss. With tariffs interdicted by law, and no possibility of their reinstatement, there would be a swift retirement of insurance capital from a hopeless field of competition. One year would probably reduce the number of companies one-third, and after five years the remaining American general agency companies could easily be counted upon the fingers of both hands. These sur-

viving companies, forbidden to agree upon rates, would probably drift into specialties. One company would quit writing dwelling risks, another mercantile risks, another would confine itself to towns with fire departments, and in the end, open competition would vanish in monopoly. Meanwhile, the splendid cash assets of the American companies which stand as a protection to the concentrated property values of the larger cities would be dissipated to the four winds, and the next great city conflagration would leave a permanent ash-heap and a population of paupers.

It yet remains to consider the effects of open competition upon local agents.

Any increase in commissions would be far more than offset by the reduction in premiums, and the necessity for rebating a part or all of their commissions to assured, which would inevitably result from open competition. Without doubt, thousands of agents would be driven out of the business, and those remaining would be driven into disreputable methods. All motives to watch the moral hazard or dangerous features in physical hazard would be gone, for the reason that the tariff reductions for betterments could not be offered as inducements for improvements.

The functions of the local agent would be simplified into something akin to those of the street-hawker. Every laudable ambition would be crushed out by the struggle for bread and butter, and the agent would inevitably become indifferent to the interests of a public indifferent to his interests.

No man can foresee all the consequences of open com-

Anti-Trust Laws and Open Competition 137

petition, but these are a few that may be predicted with reasonable certainty.

In olden times it was considered the proper thing to bestow alms by throwing handfuls of small coin to street-beggars. This advertised one's philanthropy, and encouraged the beggars. Modern charities organize, investigate, apply relief where deserved, and are a recognized factor in social progress. The difference between modern charities and indiscriminate alms-giving is the difference between tariff rates and the open competition which throws fire indemnity out of the window to be scrambled for and snatched from the lame, halt, and blind by the clamorous and able-bodied.*

* At the present time, anti-trust or anti-compact laws forbidding fire insurance companies to unite in establishing tariff rates are in force in the following states: Arkansas, Alabama, Georgia, Iowa, Kansas, Michigan, Mississippi, Missouri, Nebraska, New Hampshire, Ohio, South Carolina, Texas, Virginia, Washington, and Wisconsin.



PART II

DEDUCTIONS

The Analysis

Legislation has made no attempt to investigate the influences which affect fire insurance rating, and even if it had, the subject by its very nature cannot be intelligently investigated from the narrow standpoint of an individual state.

Fire insurance, call it what we may, is, by its very nature, an interstate industry. Its rates cannot be based upon the experience of single states, and no intelligent treatment of the subject is possible except through either national or interstate action. The states do not show any disposition to recognize this fact, but acts speak louder than words, and the annual conventions of the state insurance commissioners are a tacit admission that the insurance industry is interstate, and that it cannot be intelligently or effectively regulated except through joint state action. The national government has an ideal arrangement through a congress composed of representatives from every state for joint action in matters where it is necessary or desirable for the whole people to act in concert, and the simplest way to bring about uniform and effective control of the insurance industry would be to amend the national constitution by placing insurance under national control along with interstate commerce; but in view of the possibilities of state revenues in fire insurance, it will probably be some time in the future before the states will be ready to let go of a

thing so prolific in revenues, whatever may be the logic of such a course.

Interstate control would be far preferable to present chaotic conditions, and there is no room to hope for relief in the immediate future except through joint action of the states.

The insurance commissioners of the several states have established the custom of inviting prominent underwriters to their annual conferences, and there is a hint in this joint conference of an ideal body for the thorough consideration of the whole question, and eventual formulation of an interstate code of insurance laws. Any question brought before a joint body composed of delegates from the several states and delegates from the industry, would be broadly, intelligently, and dispassionately considered from all sides, and the problem of fire rating would receive, for the first time, the benefit of analytical investigation.

When a practical business man is about to erect a building, he consults his insurance agent, who, with a basis schedule for reference, shows him just how much he can save in every important feature of construction. With this itemized information it is possible to determine how to build to secure the lowest attainable rate. This is the business method.

It is impossible to imagine that, in a conference between state delegates and practical underwriters, reason would not dictate this same analytical study of the different items which make up the average cost from which the fire insurance rate is determined. To lower rates this cost must be lowered, and to lower cost it must be dissected in order to learn just where the pos-

sibilities of saving lie. This might be termed the substitution of business methods for political methods in legislation.

A dissection of the fire rate shows that out of every dollar of premiums received by the companies, about ninety-eight cents are distributed for expenses and fire losses. These two items constitute the cost of the goods sold, and the first question is, What proportion of this cost is disbursed under each of these items, and what are the possibilities of a reduction in each?

Statistics show that during recent years the average amount disbursed out of each dollar in premiums received hovers close to the following figures:

Expenses.	\$0.38
Losses. ....	.60

Expenses are separable into three distinct items:

1. State taxes, say.	\$0.03
2. Management expenses. ....	.15
3. Agent's commission. ....	.20

Possible Reduction in Expense Ratio

With these items separated, the next question is, What are the possibilities of a reduction in each?

The average tax of three cents is far in excess of the expense of state supervision. If taxes were reduced to the actual expense of maintaining state insurance departments, and in other respects the companies were taxed simply as ordinary commercial industries, a reduction of at least two and one-half per cent would be established from taxes alone.

The second item, management expense, averages about fifteen per cent, and is composed of rents, salaries, traveling expenses, rating expenses, loss adjustments, stationery, advertising, etc. About half of this item consists of salaries and traveling expenses disbursed in the states where business is located, in the work of rating, inspecting risks, supervising agents, and adjusting losses.

Experience has demonstrated that every attempt to reduce the expense of inspections is sure to result in an increase of losses; in other words, what is saved in the expense account through slighted inspections is more than added to the loss item. Fire insurance is a business of infinite detail, and its work must be transacted over wide geographical areas. Field expenses can probably never be materially decreased, though attempts are being made in this direction through associated effort, in which one inspector or adjuster does the work for a

number of companies at joint expense. The exigencies of competition in time may possibly evolve a saving of two to three per cent in this way.

The third and largest item of expense is agents' commissions, which averaged for the entire country last year twenty per cent. The commission question has always been a source of controversy in fire insurance. In the early days of the business, ten per cent was the usual commission paid to agents, but competition has gradually doubled this average. The steady growth of this item is ominous, because commissions are a two-edged sword; they not only increase expense, but exercise an insidious influence in increasing losses. For many years the fire companies have been divided into two camps—one favoring a straight commission of fifteen per cent for all classes of business, and the other using commissions as a bait to capture business, the size of the bait being determined by the desirability of the risk.

If a maximum commission of fifteen per cent could be established for all companies, a reduction of five per cent in average fire cost would be possible from this source. This, with the possible saving in taxes, inspections, and adjustments, would make a total reduction of ten per cent.

Analysis of Loss Ratio

The proportion of premiums disbursed to loss claimants each year will average, for all companies, about sixty per cent. This is known as the loss ratio, and the question is, How much of this is avoidable through legislative treatment? All losses originate from one of two causes: either from an inherent quality of property or from a human motive.

The first is known as the physical hazard, and the second as the moral hazard. Moral hazard of ownership is caused almost invariably by over-insurance, hence each risk combines its own moral hazard and the moral hazard arising from exposing property. Over-insurance may originate actual incendiarism, though in most cases it simply causes indifference and carelessness in the care of the property.

To a small extent moral hazard emanates from malice, revenge, desire to conceal a fact, tramps, pyromaniacs, business rivalries and other obscure things not connected with ownership, and not preventable by legislation or human provision.

So far as physical hazard is concerned, every tariff provides a reduction in rate for every material improvement in the risk; hence, under the tariff system of rating, there is no possibility of a reduction in the loss *ratio* from this source, because the concession in rate provided by

the tariff is commensurate with the reduction in hazard. The tariff is predicated upon the theory of the rate fitting the physical hazard, and that companies shall make the same ratio of underwriting profit, regardless of the character or location of the risk. The tariff points out to the owner how to minimize the physical hazard of his property, and offers a rate reduction for each improvement.

There is, however, no assignable limit to the possible reduction in *rate* from improvements in physical hazard under a system which grants a concession for every feature that tends to lessen the danger of fire. The modern improvements in construction, and fire-preventing devices now being introduced in the large mercantile and industrial establishments of the country, are reducing rates, according to the nature of the protection. In some cases rates have been reduced in this way as much as ninety per cent.

Moral hazard has no metes or bounds; there is no way to measure it, and it does not appear in rating schedules, because no company will insure property where it is known to exist. The best authorities estimate that one-fourth of all fires come from this source alone. This is undeniably a bad showing, and the question is, Who is personally responsible? Certainly not the stockholders, for they have no part in the transaction through which property is over-insured. The responsibility for over-insurance, then, must rest either with the owner or with the agent who writes the risk. If we analyze their respective motives we shall find that the owner's interest is direct, while the agent's is indirect.

The agent's motive is to earn his commission, and the

higher the commission the greater the temptation for him to disregard other interests than his own ; but in the background is another influence, the real original tempter in the garden of insurance—the company that proffers the apple of high commission.

Equalization of Insurance to Values

It is the bounden duty of legislation to recognize each of these three influences which combine to create the moral hazard which occasions one-fourth of all the fires in the country.

Nearly all the states now prescribe a standard form of policy, and it is clearly within the authority of these states to embody any clause in this policy they may think conducive to public welfare. The companies cannot prevent over-insurance, because their only basis of information is the written report received from agents. No more can agents prevent over-insurance—in the nature of things they cannot know even approximately what the value *will be at the time of fire*. Property is often insured for three or five years. The value of buildings is constantly fluctuating; and so far as personal property is concerned, there is no possible clew to its value except the estimate of the owner. In many cases the estimated value is there when insured, and not there at the time of fire, because reduced by sales or removal. There is, it is true, a negative responsibility on the part of the agent. If censurable for over-insurance the agent's sin is one of omission, brought about by his failure to perform his implied duty as a conservator of public safety, a duty which requires eternal vigilance in watching over

the fire hazard, moral and physical, of his community. This is a sin, not against the man who gets the over-insurance, but against the community at large, and it cannot be cured by rewarding the over-insured man, ignoring the agent, and fining the stockholders who, in common with the community, are the victims of a transaction between owner and agent. The practical question—how to reduce losses from over-insurance—can only be settled by considering the owner and agent as the two direct causes, and devising some practical means of removing the motive from each.

So far as the owner is concerned, there is but one preventive of moral hazard arising from full insurance, and that is to make it impossible for him to profit by a fire. The only just and practical way to accomplish this is through a condition in every policy that will preclude the owner from collecting full value in case of loss. In considering the best form of policy condition to accomplish this result, it is proper to refer to established practices. Under these practices two policy conditions have come into current use in all parts of the world. One of these conditions is known as the three-fourths value clause, which is used in certain cases to prevent *over-insurance*. The other condition is known as the coinsurance clause, used to prevent *under-insurance*. The coinsurance clause has been described. The three-fourths value clause simply provides that in case of loss the assured cannot recover more than three-fourths of the actual value of the property at the time of the fire.*

*The three-fourths *value* clause should not be confounded with the three-fourths *loss* clause (described in the chapter on the valued-policy law), which compels a man to accept three-fourths of his loss, be it partial or total; the value clause simply limits the

There has never been any uniformity of practice as to the requirement of these clauses, their use depending upon circumstances and individual judgment; but the point involved is, that one clause provides that the insurance shall not *exceed*, while the other provides that the insurance shall not *be less* than, a certain stated proportion of the value.

The fact has been mentioned that all tariffs are predicated upon the supposition that insurance shall bear a uniform relation to value, and it has been shown that blanket insurance enables certain people to get more protection than they have paid for.

Granting that this uniform proportion of insurance to value is the only basis through which it is possible to equalize rates, and that insurance in excess of value is a menace to public safety, it is a legitimate conclusion that if a clause were embodied in every policy providing that the insurance should bear this fixed relation to value, two ends would be reached, both *pro bono publico*. Over-insurance and under-insurance would be eliminated from the rating problem, and it would become possible for the companies to extend impartial treatment in rates to every patron, rich or poor.

The uniform use of a clause of this kind would warn every policy holder that, no matter how much indemnity he might purchase, he could not profit by a fire.

It would be a standing notice to people who are making one dollar's worth of indemnity do duty for two dollars, that no matter how blanket their insurance, if less

company's liability to three-fourths of the value of the property, but under this clause the assured is paid the full amount of his loss up to this limit, the intention of the clause being simply to prevent over-insurance,

than a reasonable proportion of value, they would be their own insurers for the deficit.*

With the increased premiums from large insurers, and the reduced losses resulting from the elimination of over-insurance, it is not unreasonable to infer that the universal use of a clause equalizing insurance to value, as above suggested, would reduce the average cost of fire insurance from twenty to twenty-five per cent, for the two great leaks from the aggregate indemnity fund of the country would be corked up by the simple expedient suggested.

*A clause regulating the proportion between insurance and value might be embodied in about the following language:

Other insurance is hereby permitted and this policy accepted with the following mutual agreement as to the proportion of total insurance to the actual cash value of the property herein insured at the time of loss.

If total insurance shall exceed eighty per cent of value, liability under this policy shall not exceed its pro rata share of such eighty per cent.

If the total insurance be less than eighty per cent of value, liability under this policy shall be for only such proportion of loss as the amount insured by this policy shall bear to such eighty per cent.

When attached to policy covering more than one item of insurance, this agreement to be construed as applying separately to each item.

The Commission Problem

Many years ago the prevailing compensation to agents was ten per cent. The associated companies have long contended for a maximum of fifteen per cent, but in many of the large cities, where contending influences are beyond control, competition has forced agents' commissions up to twenty-five or even thirty-five per cent, and in addition to this a brokerage is sometimes allowed to the person who solicits the risk. Many agents still believe that they could derive a larger net income out of a maximum commission of ten per cent, with no allowance for brokerage, for the broker, in addition to what agent is allowed by the company for brokerage, usually succeeds in exacting a part of agent's commission, and not infrequently all of it.*

As an important part of the commission question, it is necessary to refer to brokerage. In all large cities, brokers play a leading part in the procurement of business. The broker solicits risks and places them through an

*The automatic law of competition which regulates maximum rates seems to limit the maximum earnings of agents from commissions regardless of the commissions actually received.

High commissions multiply agents and brokers, and encourage the practice of rebating a part of the commission to the assured in order to secure his business. It has been repeatedly demonstrated that the higher the prevailing commission allowed, the smaller the net earnings of agents after they have divided these commissions with brokers and their patrons, and every experienced underwriter is ready to admit that there is a safety line beyond which any increase in commissions actually reduces agents' net income. What this maximum is has not been established. It has been shown that even fifteen per cent is sufficient to breed demoralization of this kind, and the oldest underwriters, who were in business when ten per cent was the prevailing commission, agree in the statement that the business was more free from demoralization, and the income of the local agents more satisfactory, than it has ever been since.

agent, who writes the policy. It is not unusual for brokers to rebate some part of their compensation to the assured, and high brokerage usually results in a cut rate. Frequently a broker is connected with or employed by a large firm or corporation, which owns or controls large insurable values, and the brokerage is all turned over to the firm.

Brokers are a disturbing element. Connected with no company, bound by no ties or responsibilities, their function is to find indemnity on the open market which will yield the largest profit to themselves. No risk is so dangerous, or its owner so disreputable, that some broker will not undertake to find a company to insure it. There are many honorable exceptions, but it must be admitted that the broker, as a class, is an unnecessary middleman who increases expenses and losses, and in every large city has contributed to demoralization and unsound practices.

Commission and brokerage are phases of the same thing. They are the noxious outgrowth of a system inherently bad. They are based upon an illogical method of securing business, because they interpose a middleman and a secondary middleman, whose interests are not in harmony with the welfare of the public or the industry. This is not the fault of the agent or broker, but of the system. Competitive conditions often make the broker a dictator to both agent and company, for he is the filter through which a large share of city business percolates. Brokerage adds materially to the average expense ratio of the business.

These are the facts in the commission question as it exists to-day. It is a knotty problem, with which under-

writers have struggled in vain, and in the end it may have to be settled by the interposition of legislation.

The legislative treatment of agents' commissions presents some interesting and delicate problems. It has been shown how closely commissions are connected with the loss ratio of the companies, and no intelligent consideration of fire cost can ignore the important bearings of agents' commissions. "The laborer is worthy of his hire," and the local agents of the country perform a vast and useful work; but this does not change the indisputable fact that the agent who palms off upon his patrons the indemnity that pays the highest commissions, regardless of its quality, who habitually encourages over-insurance, who robs one patron in his rate to favor another, who misrepresents his risks in order to get them accepted by the companies—who, in fine, is indifferent to everybody's interests but his own—generally succeeds in earning a much more liberal income from this sort of work than the agent who renders capable and loyal services to his patrons and his companies.

Every practical underwriter appreciates this inherent evil in a commission system which contains within itself the seeds of both moral and physical hazard. Every one deplors the fact, but it is an evil which has come down from the beginnings, and for which no one has been able to suggest an effective remedy.

That it is a matter in which the public has a legitimate interest goes without saying. That the several states have a right to fix the maximum commission to agents cannot be disputed, for it is as legitimate a matter of public concern as usury. High commissions and brokerage are a greater evil than usurious interest, because usury is sim-

ply a wrong to an individual, while unreasonable commissions are a wrong to the community.

A vital objection to the limitation of commissions and brokerage by legislation arises from the fact that laws of this kind would be easily evaded. Dishonest companies would resort to subterfuges to pay a high commission, through valuable presents, payment for imaginary services, or other surreptitious devices. While such a law would hold honest companies, it would be evaded by dishonest companies, and in the end the innocent would suffer and the guilty escape.

To elucidate the matter in all its bearings, it is well to describe the different methods of compensating agents which have been tried or suggested.

These are known as Straight Commissions, Graded Commissions, and Contingent Commissions.

The straight-commission plan contemplates a uniform compensation of fifteen per cent on all classes of business. This system has been in general use for many years by the associated companies. Its merits are uniformity, simplicity, economy in expense, and justice to the public, in that it does not interfere with the equalization of rates among classes. In theory, every class of business should bear its proper share of expense ratio. If, by allowing a larger commission on a given class, its expense ratio is increased, it follows that its rate must be advanced, or that other classes must contribute to make good the deficit. A uniform commission permits the expense ratio to be equally distributed among classes. On the other hand, the work done by agents in soliciting and writing different classes is not uniform. An agent can often earn a commission of several hundred dollars on a large mercantile or manu-

facturing establishment with the expenditure of little more time and effort than would be required to solicit and write a cheap dwelling on which his commission would be possibly two or three dollars. As a natural consequence the agent feels that he is entitled to a larger commission for the dwelling, and self-interest prompts him to place it with the company that allows him the highest commission.

It must be confessed that straight commissions, while simple, uniform, economical, and just to the public, are, in a sense, unjust to agents, especially in towns where the business consists of risks of small value.

The graded-commission system is intended to meet this injustice to agents. The objections to the plan from the standpoint of the company are, that it is complicated, difficult to keep track of, liable to be manipulated to the disadvantage of the companies by the palming off of low-commission risks as high-commission risks, and finally, that it necessitates constant correspondence with agents in order to determine the proper amount of commission due for specific risks.

The objections from the side of the public are:

1. That the plan increases expenses and hence increases rates;
2. That it has a cumulative effect in causing over-insurance and moral hazard in proportion to the commission paid, and hence tends to increase rates from this source as well as from the direct increase in expense;
3. That it prevents rate equalization among classes, and causes small property owners to pay higher rates.

The numerous and important objections above enumerated have caused the associated companies to resist

the graded-commission plan for many years, notwithstanding the admitted justice of agent's claim to a graded commission for graded work.

This antagonism between the interests of the agents on the one side, and those of the companies and the public on the other, has been a squarely defined issue for many years. Taking advantage of the situation, independent companies have been able to buy up what is known as preferred business from agents through high commissions, until the fifteen-per-cent companies, as a competitive measure, have been forced to yield to the pressure by allowing graded commissions themselves.

That an advance in rates will be necessary to meet this increase in expense is inevitable, and the fact that all companies have finally been driven into a higher expense ratio through competition, affords an instructive illustration of how open competition raises the cost of fire insurance.

The contingent-commission plan provides a commission of ten per cent to the agent, and at the end of each year allows him a contingent of fifteen per cent on the profits of the agency for the year. The advocates of this plan claim that it makes the agent a partner of the company, and creates a motive to select his business with care, in order that he may realize a profit upon it, and that this motive not only induces the agent to scrutinize closely the values of insured property, but in other respects harmonizes his interests with those of his companies and the public.

This plan has not been tried in this country on a scale sufficiently large to test its merits. It is said to have been at one time in common use in Canada when agents gen-

erally represented but one company, but when agents began to represent more than one company, the system fell into desuetude. This fact would seem to confirm the general opinion that the plan would be impracticable in agencies where more than one company is represented, which is the case with nineteen agencies out of twenty.

In every agency a part of the companies are reasonably certain to have enough losses each year to place them out of the category of contingent earners for the year, but the agent can still get ten per cent commission from these companies for risks he would hesitate to place with his contingent earners. This creates a motive on the part of each agent to discriminate among his companies, and this motive is cumulative in the fact that it increases toward the end of the year with the growth of the accrued contingent due him from companies that have had no losses. As the end of the year approaches, this accrued contingent in a single company may become a hundred times as large as the commission on a single questionable risk, and the motive grows day by day to coddle the contingent earners by giving them all the choice business, and by giving the questionable risks to the companies that have ceased to be contingent earners but are still commission earners. In other words, the plan does not cure the real evil inherent in all existing forms of commissions, by attaching a personal responsibility to agents for reckless underwriting, but simply adds to the existing motive to earn commissions, another and a hundred-fold stronger motive to sacrifice a part of the companies in an agency in order to husband a contingent that may represent a large share of the agent's entire income for the year.

Other objections have been urged, but this seems to be the real reason why so few underwriters regard the plan favorably.

A careful study of the three commission systems shows them to be subject to one and the same defect. They all estrange agents from the companies and the public, by isolating their interests.

The real problem is to remove this barrier of antagonism, and create a permanent motive on the part of the agent that will be in harmony with the best interests of the industry and the community.

Any plan that will produce this result will probably save the American people from twenty to thirty millions of dollars per annum in fire waste, and do much to reduce the existing friction between the public and one of its most important utilities. A problem so important is worthy of careful study, and its successful solution would justify concessions and sacrifices on the part of all concerned.

Agents are the active parties in the negotiation of every insurance contract, and as such, in justice, should be held personally accountable for their own acts.

Theoretically, the state has an insurable interest in property, because it has the right of taxation, and if the property be destroyed by fire, its taxes are lost. True, the insurance money may rebuild the property, but this money has been collected from its citizens, and the value is none the less wiped out of existence. The owner cannot well remove the insured property to another state, but in case of loss he may, and frequently does, migrate with his money, in which event the taxable value is doubly lost—by fire and removal.

Granting the agent's personal responsibility and the state's insurable interest, the state clearly has a right to exact indemnity for its interest; and in this lies the suggestion that when a fire starts on or in the premises insured, the state require the agent personally to indemnify it for its taxable interest in the property to the extent of the premiums on the risk, increased in proportion to the commission received by agent, the amounts so collected to go into a fund for an official investigation of the origin of the fires.

To make this plain, let us suppose that the standard of commission be fixed at fifteen per cent. If the agent receive fifteen per cent on the property, he becomes an insurer to the state for the amount of premiums actually paid. If his commission be twenty per cent, he becomes an insurer for one-third more, because his commission was one-third more than fifteen per cent, or, for the same reason, he would insure the state for two-thirds more if his commission were twenty-five per cent.

Supposing the premium to be \$100:

If commissions were 15 per cent, agent insures state for..	\$100 00
If commissions were 20 per cent, agent insures state for..	133 33
If commissions were 25 per cent, agent insures state for..	166 67

When fire originated on the premises, agent would contribute to the state such proportion of his risk as the company contributes on the amount it insures. In other words, if the company's loss be twenty-five or fifty per cent of its policy, agent would pay twenty-five or fifty per cent of the above amounts, according to his commission.

This plan makes the agent an insurer in a small way,

increasing his liability in proportion to his commissions, while this liability, being limited to the premises where the fire originates, would not be serious in any one fire. This liability, however, would attach in a way to appeal to his intelligent self-interest rather than to his cupidity in writing *every risk*, and his caution would be aroused, not only in proportion to his commission, but (when writing high-rate or hazardous risks, where caution is most needed) in proportion to the rate.

This plan seems to ally the agent's interests at every point with those of the company, and removes the incentive to criminal recklessness in proportion as high commissions increase this incentive, and in so far as commissions tend to increase moral hazard this tendency would be cured, though high commissions would still appear in the expense ratio.

The suggestion, however, embodies a necessity which possibly might have a pronounced effect in reducing the average expense as well as loss ratio of the business. If agents became personal insurers of the state, it would be necessary for each policy to show the amount of commission in order to determine the agent's liability to the state in case of fire. This would inform the policy holder how much commission the agent received on the policy; in other words, the amount received by the agent would become as public as the amount received by the company.

The salutary results of publicity in fire insurance have been pointed out, but publicity, so far, has been confined to the affairs of the companies. The logic of extending this publicity to agents' compensation is obvious, and there is a possibility that through this means the long-sought solution of the evils of high commission might be found. The public has an opportunity to know all about

the affairs of the companies, but it has an equally vital interest in knowing, when it buys a policy from an agent, just what commission he receives.

As the agent usually selects the company for the assured, the man who accepts a policy has a logical right to know the agent's motive in his selection. If the agent receives a high commission, and delivers the policy of a company of inferior standing because of this commission, when the policy of a much stronger company might be purchased for the same money, the assured has a right to know the facts. If the company writes the risk at a cut rate, and pays the agent a high commission, it is doing an unsafe business, and the assured has a right to information which would prompt a man of ordinary prudence to select another company.

Again, the purchaser of a policy has a right to know on general economic principles whether the company is aiding and abetting in the increased expense ratio of the country, and helping to create moral hazard and high rates through high commissions.

Every argument for publicity in the financial affairs of fire insurance may be legitimately urged for the same publicity with regard to the commission it allows. This publicity would be enforced by a law requiring every policy issued to show the actual commission and brokerage, and imposing a penalty for any misrepresentation of the facts, or evasion of the letter or spirit of the law by company or agent.

It may be claimed that this publicity would encourage policy holders to insist upon a share of agent's commission as a rebate, and that this would lead to promiscuous rate-cutting; but it may be as logically claimed that the growth of this practice would in time teach all agents the

advantages of a uniform and reasonable commission, which, by lowering cost, would enable them to give all their patrons lower rates instead of distributing rebates to a favored few, and which at the same time would tend to purge agency work of irresponsible competition.

The plan suggested would fit in with either straight or graded commissions, and the important reduction in average loss ratio which might be expected would justify a reasonable advance in commissions as an offset to the risk assumed by agents as insurers of the state. What is this risk worth? The average rate of the entire community is about one per cent, hence the agent would assume on an average only one-hundredth of the risk assumed by his company, provided he insure the state on all property destroyed, but as the agent's liability is confined to the risk where the fire originates, it would be much less, probably not one-third on an average, hence the agent's liability would average probably less than one three-hundredth of the total liability assumed by the companies. This percentage is so small that it would not in itself justify an appreciable addition to agents' commissions; but in view of the financial responsibility imposed upon agents, and in consideration of the reduced loss ratio which might be expected, an increase of commissions from fifteen per cent to sixteen and two-thirds per cent, while largely in excess of the risk assumed, would be justified.*

*To be exact, if agents were paid for the risks they assumed as the companies are paid, they would be entitled to an increase of one-third of one per cent, consequently an advance of one and two-thirds per cent would give them five times as much as the companies receive for assuming the same liability. From an economic point of view, both the companies and the public could well afford to allow agents a straight commission of even twenty per cent, if by so doing the moral hazard arising from present commission systems could be suppressed, for the possibilities of material reduction in fire cost lie in the loss ratio, to a far greater degree than in the expense ratio.

This plan seems to reach the root of the commission evil, though it would probably meet with opposition on the part of many local agents who lose sight of their own ultimate interests in their eagerness for a liberal compensation. In view of the complications of the commission question, it is not surprising that many agents should be mistaken as to their own best interests.

The Local Agent's True Interests

Local agency work is in the nature of a public trust; when it comes into its own, it will be an honored profession, in which the shyster will receive scant courtesy. It is the delicate task of the local agent to hold the scales evenly poised between his company and his customer. It is his duty to know his business, and to recognize and resist every practice inimical to fire insurance as a vocation. He should understand all the niceties of the law of contract, and know the bearings of every policy condition. He should be cognizant of every important feature of physical hazard, a judge of values, and familiar with commercial usages; he should know how to inspect a risk, adjust a loss, and many other things. To know all these things, he must study and progress, and take a pride in his vocation, and be ready to assist in its depuration from harmful influences.

There are many agents at the present time who are capable of rendering services of this kind, but the constant clash of interests between agents and companies, created by the present commission system, prevents the companies from utilizing agents' services as they could and would if the system were so changed as to bring these interests into harmony.

This barrier of antagonism once removed, the companies could utilize the services of competent agents in a much larger measure than possible at present. It

would be no longer necessary to send an inspector to supervise the business of every agency every few months, for with the obliteration of clashing interests created by commissions, the agent could do this work as the trusted ally of the company. The expense of traveling necessitated by the work of supervision, inspection, and adjustments would be largely saved, and the companies could afford to pay capable agents a higher commission, for their services would be correspondingly more valuable, not only to the companies, but to the public.

The commission system, like the tipping system, is demoralizing. It is beneath the dignity of the service expected, and that ought to be rendered. It shuts out opportunity for growth into higher duties, because it destroys the confidence which must exist before the companies can consistently entrust these duties to their local representatives. It keeps the intellectual grade of the work down to a level where every adventurer is free to try a hand in competition, regardless of competency or character. It erects a barrier between the agent and company, and lets down the bars to untrained and irresponsible competition.

As a whole, the commission system is not constructive, but destructive, and the remedy for this must be sought in some plan, simple, inexpensive, and practical, that will unite agents, companies, and the public in an harmonious effort to reduce fire cost through analytical study of its parts, and a common purpose to eliminate the waste which is so largely the result of a system that from the outset has embodied the elements of distrust and discord. If agents by assuming a moderate financial responsibility for their own acts can bring these discordant

interests into harmony, the result, in increased confidence of their patrons and principals, will in itself be ample compensation, though the companies and public could well afford an adequate increase in their compensation as a *quid pro quo*.

Résumé of Possible Rate Reductions

The preceding suggestions as to the possibilities of reduction in cost may be summarized as follows:

In tax reductions.	\$0 02½
In combined inspections.....	02½
In commissions—if reduced to the average of 15 per per cent.....	05
In losses, through reduction in moral hazard and equalizing insurance to value.....	25
	<hr/>
Total.	\$0 35

These figures show a possible reduction of about one-third in fire cost through analytical treatment and legislation based upon reason instead of rancor; but there are still further possibilities of reduction through the encouragement of fire-preventing devices, improvements in building construction, and the enforcement of intelligent regulations in regard to the use, storage, and sale of dangerous substances.

Under tariffs, these improvements are stimulated through the great motor-nerve ganglion known as the pocket-book, but with tariffs and rating associations suppressed, all incentive for improvement ceases. It is not unreasonable to believe from past experience that the reduction in physical hazard from improvements encouraged by tariffs would further reduce average cost within the next five years at least twenty per cent, and with this

reduction in cost, rates would drop to about fifty per cent of what they are at present. To accomplish this is by no means impossible, but it will be impossible until the state authorities stop trying to make things uncomfortable for the industry, and lend their friendly co-operation in the work of analyzing and minimizing the causes which create the present average cost.

Rate Equalization

The two taxes people pay for the protection of law and protection from fire are cognate, but there is a vast difference between the simple problem of the tax assessor and the complex problem of the fire rater.

The assessor simply estimates the values of taxable property, but the state very properly provides for a revision of the assessor's work by a board of equalization, in order to ensure accuracy. The mere fact that the assessor's estimate must be approved by a board of revision shows that, in the eye of the law, it is not an easy thing to accurately measure the values of taxable property—that it is admittedly difficult in the eyes of the public is shown by the tolerance with which gross irregularities in valuation, established through the elaborate machinery of the law, are endured by all classes of citizens.

On the other hand, the fire company is expected to do precisely the same thing through hundreds of inexperienced agents in distant states, and any mistake in values is at the peril of the company. If the valuation is too high, the valued-policy law compels the company to pay the full estimate, regardless of value; if too low, the anti-coinsurance law forbids the company to require the assured to carry the excess of value for which he pays no consideration. The company is held to a rigid accountability for its agents' estimates of values, and punished

whether too low or too high. The law does not recognize the possibility of error; every mistake is penalized.

But the estimate of values is merely the beginning of the fire company's task in equalizing rates. Equity must be meted out to each state as compared with other states, and to each property class as compared with other classes, and to each individual as compared with other individuals, and lastly, to each year as compared with other years. This equity as to territory, time, property classes, and individuals is the problem of fire insurance, an equation so involved that it never occurs to the average citizen that it is capable of solution, or that any system has ever been devised to disentangle equity from the plexus of obscure influences which create the fire rate.

No more intricate problem ever vexed the mind of man, and one who studies the methods through which it has been solved cannot but be amazed by the fact that year after year the tax, as a whole, is assessed so closely as to leave a residuum of less than two cents out of each dollar of the tax.

To convey an adequate idea of how this has been accomplished through experience and co-operation would be to describe the whole *modus operandi* of fire rating, which would require a volume.

To claim that the system is perfect would be unwarranted, but that it is a growth from the combined experience and intelligence of the personnel of a world-wide industry entitles it to at least respectful consideration, until some inspired genius shall devise a more perfect system.

That tariffs command the respect of all underwriters

is shown by the fact that they are the guide to the so-called non-tariff company. It may cut rates, but this fact simply proves that the tariff rate is its landmark. The insurance company, be it tariff or non-tariff, must have some beacon. It cannot simply guess at rates. It must have a system, and *the system of the non-tariff company is to buy its risks as close to the tariff rate as possible.* This is the strategic plan of the non-tariff company at all times and in all cases. There are no exceptions save with irresponsible "wild cats" who accept premiums without the slightest intention of paying losses.

The one generally recognized imperfection of the present tariff system is its unwieldiness, which permits one class to become and remain profitable, and another unprofitable, because of the delay and expense of a general rerating. The rating of hundreds of thousands of risks in all parts of the Union requires years of time and millions of money. It is a task far more difficult and expensive than the taking of the national census.

Existing fire tariffs are so constructed that they cannot be changed with every fluctuation in annual loss ratio. When made, they are made to stay, because they are based, not upon the experience of one year, but upon the average of many years. It is expected that some years will be profitable and some unprofitable, and the intention of the tariff is to find the average, or mean, of the loss wave, with the expectation that the accumulations of profitable years will be disbursed during unprofitable years. The fixed tariff that remains unchanged year after year, like Pharaoh's dream, is to be interpreted that the seven lean years shall devour the seven fat years, but unfortunately people are forgetful. During the fat

years they forget the lean years, and begin to kick at the inflexible fire rate which exacts back the largess distributed among them during the lean years. Meanwhile, competition secures their business during the fat years, and when the lean years come it steps out, and leaves the field to the companies that have cleaved to the tariff through prosperity and adversity.

There are two reasons for the theory of the unchanging tariff. First, the desire of merchants and manufacturers to figure with certainty on their expense account. Second, the delay, difficulty, and expense of establishing new rates.

The utter lack of appreciation on the part of the public, its forgetfulness of past experience, and its readiness to bestow its patronage at all times on the lowest bidder proves the impolicy of maintaining an unchanging rate year after year, regardless of loss ratio.

But all existing tariffs have been constructed on this plan; and any change in the system through which rates could be promptly and economically adapted to existing conditions, would necessitate the rerating and publication of new tariffs for the entire country. Should this change ever be established, in order to attain the necessary flexibility in rates it would be necessary to adopt an unchanging standard rate for statistical purposes. This standard once established, and the country rerated, it would then become possible for each company to exercise its own judgment in promulgating rate modifications by percentage changes from the standard class rate, just as manufacturers announce their selling prices by percentage changes from their printed price lists.

With a uniform system of classification maintained in

good faith by all companies, it would be possible to designate in the printed tariff the class of each individual risk, and at the beginning of a year each company could announce to its agents by class numbers the percentage additions and deductions it would require in writing individual risks of each class group for the ensuing year, and in this way each company could establish its own rates independently. The general adoption of this plan would make tariffs as flexible as price lists of merchants and manufacturers, and fire companies could announce rate changes as promptly as the makers of window-glass, agricultural implements, or sewing-machines.

Standard rates logically belong to any tariff system established upon classifications, because classifications themselves cannot be accurately maintained upon fluctuating rates. A comparison of the losses with the premiums derived from rates that are constantly changing will not show true ratios.

As a standard rate is essential to the establishment of true ratios, the interesting question arises, What shall this standard rate be? It is obvious that it cannot be the actual rate obtained in different sections or states, for the cost of insurance in some states is twice as high as in others.

The standard must be essentially the gauge or landmark by which rates are to be established, and it would be necessary to consider the state experience as well as each class experience with relation to this standard, in establishing a proper standard for each state.

In establishing any standard, it must have some agreed relation to the average cost, and if a standard can be established to bear an agreed relation, it follows that it

can just as well be established at estimated cost itself. Present statistics do not supply the information on which to establish a mathematically true estimate of the cost of each risk, but they furnish ample data to establish a tentative cost very close to the actual cost—in any event, sufficiently close for practical purposes to entitle it to be called cost. With a basis tariff established on this tentative cost, statistical experience would eventually develop an absolute cost basis schedule; in the mean time, the standard of tentative cost would answer every purpose of actual cost, for it would give a fixed fulcrum from which the companies could promptly lower or raise rates to meet existing conditions.

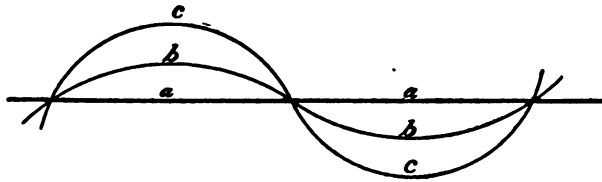
Data accumulated in this way, through combined experience extending back over ten-year periods, would command the respect of the companies and the public, and with confidence once established, companies would fear to go below the demonstrated cost, and the public would hesitate to patronize a company that did. On the other hand, the companies would be forced by competition to adhere closely to cost in establishing rates, under penalty of losing business through competition.

Rates made from this standard might fluctuate slightly each year, but the variation would rarely exceed five per cent from the median line representing average class cost, and rate fluctuations would not be so great as to discommode the public.

This system would tend to change the straight line representing the present inflexible rate to a flattened wave about half-way between the straight line and the wave representing actual cost variations year after year. This modified wave would approximate the straight line

representing average cost so closely that policy holders would not be discommoded by extreme rate fluctuations. Without departing from the actual cost wave far enough to leave room for the development of rate-cutting during the trough of the wave, it would not make the deficit so heavy during the crest of the wave as to cause a general desertion of the class.

To illustrate: Let us suppose the straight line *a a* to represent the average cost, the curved line *c c* the actual cost wave resulting from annual variations, and the curved line *b b* the rates actually charged through annual rate announcements of the companies. The dia-



gram shows that the variation between *b b* and *c c* would be so narrowed that companies would not be justified in cutting rates or paying high commissions; meanwhile, the difference would go to the public in an equitable distribution among policy holders instead of to high-commission agents and favored people who secure cut rates and blanket insurance.

There is a growing belief among underwriters that reform in rate equalization can be secured only in this way, as difficult and expensive as it may be. The change would require all companies to keep a uniform classification of their business, and to furnish their annual

experience to a national bureau of statistics. It would also be necessary for each company to keep an additional column in its register for statistical purposes. This, however, would be the smallest part of the expense, for the change would require the rerating of the entire country, which, with the present available force of educated raters, would probably take some years to accomplish. With the present underwriting profit, and the universal clamor for lower rates, the business cannot stand the expense.

There is another even more important objection. If only a portion of the companies were willing to join in a movement of this kind, the invaluable data accumulated would quickly be appropriated by companies which had not contributed to the work either with information or money. In other words, if the leading companies of the country should join in a movement of this kind, it would be tantamount to a successful merchant or manufacturer laying open his books, and showing his rivals the secrets of his success.

It is hardly probable that this objection can be overcome until the state authorities compel all companies to join in furnishing their data for the common good of the public and fire underwriting. The benefits, however, to be expected from a reform of this kind are so great that prominent underwriters have publicly recommended that the states require uniform classification.

The advantages of classification and a standard rate, briefly stated, are as follows:

1. Rates would be scientifically equalized among classes, individuals, and states, and fluctuations minimized.

2. Tariffs would become flexible, and it would be possible at all times to adapt rates to existing conditions.

3. Rates so established would restore harmony between the public and the companies, for the reason that they would command universal respect.

4. With this statistical system once established, the necessity for rate agreements would ultimately cease. The individual company could guide its course with this information as intelligently and independently as a grocer or dry-goods merchant.

5. The states would have an absolutely reliable basis on which to determine the adequacy of the unearned reserve required of every company.

6. The plan would establish fixity in the business, and endow it in a measure with the certainty and stability of banking. It would change fire insurance from the art of premium-getting to the science of underwriting, which it should be. Economy of management and a comprehensive knowledge of fire underwriting would become a prerequisite to the successful management of a fire company. The inrush and outrush of speculative capital in response to wide fluctuations in loss ratio would cease, and eventually fire insurance would become a steady-going, plodding industry, offering small but reasonably sure returns to capital.

Conclusion

The outstanding obligations of fire insurance in the United States aggregate about forty billions of dollars, and the vast store of indemnity it hives to meet these obligations is not spoil or booty. It is a fund that in its incoming should be fairly assessed, and in its outgoing justly disbursed. It is not a thing to be looted or plundered.

When this nuclear truth is once realized in all its bearings, the common sense and common fairness of the American public may be relied upon to perform the task of unwinding the tangle of selfish personal influences which binds the industry of fire insurance hand and foot.

The black death, confluent smallpox, and other pestilential visitants of mediæval Europe were finally conquered by simple means. The malignant bacilli that survived the effects of pure air, pure water, and sunshine were made to devour each other by inoculation. What sanitation and inoculation have done for the public health, publicity, personal responsibility, and uniformity will probably do in redeeming humanity from the modern pestilence of monopolies.

The miasmata of secrecy and obscurity which breed the virulent form of confluent capitalization known as the trust evil cannot survive the sunlight of open scrutiny. The most dangerous enemy of an aggregation of capital is another aggregation of capital. When the public has a

chance, through publicity, to know what every trust is earning, other capital may be depended upon to fight for its share of the profits until profits come down to the norm where competition ceases to be profitable. If the sunshine of publicity were allowed to shine into the devious ways and dark recesses of other industries as it is allowed to shine into the inner affairs of fire insurance, monopoly would stand no better chance in other industries than it stands in fire insurance.

If the affairs of fire insurance are not utterly public, it is because the state authorities, in their ignorance of the ins and outs of the business as transacted, do not know how to frame adequate laws. The companies that have systematically pursued the policy of buying up preferred classes of business, through high commissions, have a vital interest in making their expense account as small and their loss account as large as possible, in order that the public and the companies observing a commission tariff may have no clew as to their real underwriting profits. This is easily accomplished through the legerdemain of bookkeeping, by shifting a portion of their expense account to their loss account. That this is systematically done by some if not all of the companies who refuse to observe a commission tariff is not to be doubted, nor is it to be doubted that this legerdemain which increases the ostensible average loss ratio of the country, also contributes in no small share to the raising of fire rates.

Common justice demands that personal responsibility in fire insurance be placed where it belongs. The fiction of penalizing stockholders for the sins of agents and policy holders is as illogical as the scapegoat of the Hebrew tribes. Every underwriter knows and admits

that the business of an agency is the result of the agent's personal efforts. Every local agent strenuously claims this business as his personal property, and if this claim be true, the tail should go with the hide—the personal responsibility should attach to the agent who transacts and owns the business. If this increased responsibility entitles agents to increased compensation, it should be freely granted. So far as the policy holder is concerned, there is no reason why he should be exempt from personal responsibility to a greater degree than other people who enter into contract relations. At the present time most of the states prescribe a standard policy. The policy contract is no longer unilateral (one-sided), because the conditions are imposed by state authority, and not by the insurance company. There is no longer any reason why every doubtful meaning in a policy contract should be construed by the courts in favor of the assured. The pillage of the national indemnity fund through the allowance of preposterous claims, on the theory that the insurance policy is a unilateral contract, adds materially to the cost of fire indemnity. This pillage is at the expense of the community; and now that the contract is prescribed by the state, there is no longer any reason why the interests of the company and the assured should not be weighed as impartially in the scales of justice as the contract relations between a lessor and lessee, or bailor and bailee.

The final desideratum is uniformity in the requirements of the states, and in the usages of the industry—uniform laws, uniform taxes, uniform financial statements, uniform policy blanks, uniform proportion of insurance to value, uniform classification, uniform rate

tariffs that do not discriminate among property owners, and uniform commission tariffs that do not discriminate among agents or property classes.

If system in fire insurance is preferable to confusion; if a just assessment and disbursement of the fire tax is preferable to the methods of spoilsmen; if fair treatment to every citizen is preferable to unfair discrimination on behalf of a favored few; if economy is preferable to extravagance; if a conscientious safeguarding of life and property through a system of just rate reductions for every improvement is preferable to a conscienceless encouragement of indifference to the safety of life and property—then the duty of the American public toward fire insurance is so plain that “he who runs may read,” and “the wayfaring man, though a fool, shall not err therein.”



APPENDIX



Veto Message of Governor Leslie M. Shaw of Iowa

The Valued-Policy Bill was passed by the State Legislature of Iowa in March, 1900. The following is a verbatim copy of Governor Shaw's message containing reasons for withholding his approval of the bill :

The accompanying bill, Senate File No. 69, an act to amend the laws concerning insurance, etc., and popularly known as the "valued-policy bill," is hereby deposited with the Secretary of State without approval.

Bills passed prior to the last three days of the general assembly become operative unless the chief executive within three days returns the same with his disapproval, while those passed during the last three days of the session must needs be approved and signed in order to be effective; but thirty days are allowed in which to consider the same. Evidently the framers of these provisions recognized that the pressure of business during the closing hours of a session of the legislature renders it impossible to give the same deliberate consideration to pending legislation as is obtainable earlier in the session. This bill was carefully and exhaustively considered by the senate committee on insurance, to which it was submitted, with the result that eight out of the twelve members of said committee signed a report recommending that the bill be indefinitely postponed. Without fault of the author of the bill, this report was not made until very late in the session; and it was never considered in a committee of the house, nor was the measure discussed at any considerable length on either floor. It was passed in the hurried hours of the day preceding final adjournment.

Laws of this kind are not novel. They are found on the statute books of several states, and fortunately, therefore, we are

not confined to theory, but the practical and actual effect of these laws is obtainable. I have availed myself of the statutory period allowed me to make such investigation. Representatives have been sent to several states where similar laws are in force, and a large amount of evidence has been gathered.

I have in my possession the sworn record of over eight hundred policies, collected in the southern tier of counties of Iowa and the northern tier of Missouri, giving the company, the number of the policy, the amount and rate, and the name of the assured. These reports cover insurance written both prior and subsequent to the enactment of the valued-policy law in Missouri, and in many instances the property is identical. It is impracticable to set out this evidence in detail, but I submit a synopsis of the same as an appendix hereto, and the affidavits will be subject to examination by any one desiring to investigate the question further. To my mind they are as conclusive as such evidence can be that the rate of insurance has been materially increased by reason of the valued-policy law—in many instances it has been doubled, and in some cases considerably more than doubled. For instance, I have the affidavits of eleven business men of Kahoka, stating under oath that farm rates in Clark County, Missouri, have been doubled since the passage of the valued-policy law; and an equal number of business men in Lancaster swear to same state of facts in Schuyler County of the same state. Similar results are shown to exist in each of the counties, if not blocks of counties, in that state, where farmers are unable to obtain insurance at any rate, or on any terms. The same effect, though not in so marked a degree, is shown by letters and correspondence in my possession, and personal interviews in such portions of Nebraska, Minnesota, and Wisconsin as I have been able to investigate.

One other feature is worthy of consideration. When the law was first passed in Missouri it was general in its scope, and applied, as does this bill, to all insurance companies and associations. Immediately a large number of companies withdrew from the state, and mutual associations sprung up in many counties. Though local in their nature, these associations found it impossible to operate in the face of this law, and united in securing an

Veto Message of Governor Shaw of Iowa 189

amendment expressly exempting that class of associations from the operation of the law.

The argument quite generally relied upon in support of the law is the proposition that when an insurance company charges and receives a premium for a given amount of insurance, it should in case of loss pay the full amount contracted for, and that there is no reason why an insurance company should not deliver all that it has received pay for, that would not apply with equal force to any mercantile transaction. I think those who rely upon this proposition misunderstand the nature of insurance. Suppose the contract provided that the company should indemnify the insured against all loss or damage not to exceed a stated amount—the face of the policy. Would any one claim such a provision unjust? We already have a law which makes the amount of the insurance presumptive evidence of the value of the property, and the burden is placed upon the insurance company to prove affirmatively that the property is worth less than this amount; and in no instance, I think, has a jury ever failed to find adversely to the company on this proposition. I believe this provision goes to the limit of safety. There is no escaping the proposition that the insured must pay all losses, and any law that has the effect to increase the hazard must necessarily increase the rate. In my judgment, the state that secures the minimum rate will be that state that provides a uniform policy, to be used by all companies, and that limits the amount of recovery to three-fourths of the actual loss. True insurance is indemnity. Nothing in excess of actual loss should ever be collectible. In order to reduce the loss to the minimum, there must be some inducement for the owner of the property to throw water rather than oil on incipient fires. He should be made to realize that carelessness, defective flues, and piles of inflammable rubbish are not wholly at the risk of his underwriter.

I am aware that it is urged that insurance companies can protect themselves by refusing over-insurance. This is more easily declared than demonstrated. If any one thinks otherwise, let him appraise any score of buildings within his knowledge, and fix an amount equitable between insured and insurer. Or if this proves too difficult, let him find an expert who can thus value property without first examining plans and making computations. In practice, farmers, and especially those with poor buildings, are

made to suffer more from this class of legislation than those living in towns, where the property can be more readily examined, and where competent estimates are more readily obtainable.

Insurance companies even now dread over-insurance, and I think it safe to challenge the friends of this measure to produce an insurance agent who is not repeatedly cautioned, warned, and entreated to protect his company against excessive valuations. I am not so certain that agents always obey these instructions, for necessarily their compensation must consist of commissions. Very few agents can make a living writing insurance for one company. They only succeed by representing a number of companies, and representing all on commission.

It has also been urged in defense of this measure that it would do no harm to give it a trial, and if it be found to work badly, then repeal it. But the fact confronts us that in states where similar laws have been tried, however obnoxious, in only one instance, so far as I can learn, has a legislator been found willing to make a fight for its repeal and face the inevitable partisan accusation of working in the interest of corporations. The legislature of Missouri exempted local mutual associations from the effect of the law for the relief of the farmers of the several counties where such associations existed, but no one possessed the temerity to urge the exemption of insurance companies generally from its effect in behalf of the farmers in such counties as have no mutual associations, and are now in many cases unable to secure insurance at any price.

I would promptly sign the bill if I were not convinced of its evil effect, and if I were not quite sure if once placed upon our statute books it would remain forever. If rates were to gradually advance, as they surely would, popular opinion would charge the companies with having formed a combination. Few would be ready to admit the element of self-defense. The bill is not rejected in behalf of insurance companies, but because such investigation as I have been able to make convinces me that it increases insurance rates far out of proportion to any possible advantage that may be gained thereby.

In 1893, Governor Pattison, of Pennsylvania, vetoed a similar bill, and in the course of a very able argument in support of his action said: "Over-insurance and over-valuation are conducive to fraud, perjury, and arson; they breed crime — the most dangerous

Veto Message of Governor Shaw of Iowa 191

and demoralizing. Commonwealths which, in obedience to a false public clamor, have ingrafted a contrary principle upon their insurance laws have reaped the whirlwind, and in the end honest insurers have to pay the penalty in increased rates. The experience of our sister and neighboring state of Ohio has been that under the valued-policy law the amount of risks written increased rapidly, but the losses increased even more strikingly."

In the same year Governor Altgeld, of Illinois, vetoed a similar act, and in the course of his discussion used this language: "Insurance is an indemnity, not a speculation. It is intended to protect a man against loss, not to give him something for nothing. Its object is to make a man whole, so that he shall be no worse off after a fire than before. The principles involved in this bill would enable a man in many cases to be twice as well off after a fire as he was before. In all cases where a dishonest man could by conniving with agents or in any other way secure insurance for more than the real value of his property a fire would be a blessing. There would be a standing bribe, a perpetual inducement to allow his property to burn—I will not say to have it burn; and when it is remembered that a fire in one building always endangers and frequently destroys property near by, which often is not insured, it would be bad policy for the state to permit a condition of affairs to exist which, to say the least, tends to increase fires. . . . It is true that several of the states have adopted acts similar to this bill, except that they provide against fraud, which this bill does not" (neither does the bill under consideration, except in case of concurrent insurance), "but these states' experience has shown that the proportion of fires has greatly increased; consequently the insurance rates have been raised in all of these states, and the general public, which pays insurance, has in this way been taxed to an extent which would otherwise not have been, and this largely for the benefit of the very few who were fortunate enough to have a fire which totally destroyed their property."

In 1899 Governor Thomas, of Colorado, vetoed such a bill, and in the course of his discussion of the question used this language: "The experience of other states under legislation like this is most instructive. In every one of them the proportion of fires has greatly increased, and the ratio of this increase presupposes incendiarism. The natural and necessary result has

been an increase in the rates of insurance, which means an additional tax upon the insuring public. The increased burden which these laws impose upon the insurer is shifted by him upon the mass of policy-holders, and the community is the ultimate sufferer. From every standpoint the measure is a vicious one. From none of them can its policy be defended. Protection against loss is the only possible basis of sound fire insurance, and any departure from it will pave the way for the perpetration of fraud and wrong."

In 1891 bills similar to this were introduced in the legislatures of fifteen different states, and were passed by none.

In 1892 similar bills were introduced in six states, and but one was passed.

In 1893 similar bills were introduced in seventeen states, and passed in three, two of which were vetoed.

In 1894 similar bills were introduced in six states, and rejected by all.

In 1895 similar bills were introduced in eighteen states, and passed in but one.

In 1896 similar bills were introduced in seven states, and passed by two.

In 1897 similar bills were introduced in three states, and passed by none.

In 1899 similar bills were introduced in fifteen states, and passed in four, three of which were vetoed. Governor Thomas of Colorado, Governor Wells of Utah, and Governor Sadler of Nevada promptly vetoed. Governor Atkinson of West Virginia allowed the bill to become operative without his signature, but filed a memoranda of his objections to the bill, from which I quote a part, as follows:

"It is against public policy.

"It cannot accomplish the object for which it was intended.

"It applies only to real estate, and not to personal property, and therefore is class legislation."

(The bill under consideration is also vulnerable to this objection.)

"It requires the adjustment of a loss by an insurance company before any loss occurs, which is inconsistent, unreasonable, and expensive both to the insurance companies and the insured.

Veto Message of Governor Shaw of Iowa 193

"It will drive out of the state many solid and safe companies that are a public necessity.

"'Valued-policy' laws of this character have not proven satisfactory in the states that have tried them, and it seems to me we ought to profit by the experience of older states.

"The demand for the passage of this law comes in the character of a public clamor, based upon a false idea, and it is never safe to yield to a clamor of any sort. Such measures always react with terrific force."

Similar bills have been introduced in the Iowa legislature at nearly every session for years; but a painstaking investigation of the subject has heretofore saved the people of this state from what I believe would prove a calamity, and I doubt not the same result would have followed the bill this year as heretofore had time permitted more deliberation.

Nor is this all. The insurance commissioners of every state, I think, where such laws exist have repeatedly called attention to their unfortunate effects. The insurance commissioner of Ohio, in 1895, in his annual report, uses this language: "I fear that the heavy loss ratio in this state can be traced to some of the obnoxious legislation enacted with reference to insurance companies." In further explanation of his views, he copies into his report a letter which he wrote to an official of another state making inquiry as to the effect of the valued-policy law in Ohio. In the course of his letter he says: "To say that fires have steadily increased since the enactment of this obnoxious law is to put it mildly. In my judgment, no man ought to receive from the insurance company a dollar more than his actual loss. . . . The legislature of Ohio ought to have repealed the law years ago. . . . The rates have steadily increased since the enactment of this law, clearly showing that the honest people in the end are compelled to pay for the dishonest losses. The existence of this law in Ohio has, in my judgment, been the cause of the destruction of hundreds of thousands of dollars' worth of property belonging to innocent persons."

The insurance commissioner of Wisconsin, criticising this law, in his report of 1895 says: "The very foundation principles of fire insurance are opposed to such a law. 'Fire insurance is indemnity — it should never be gain' — it is intended only to

make good the actual loss sustained, and to make a company liable in case of total loss for the full face of the policy irrespective of the value of the property, has been the means of increasing the number of fires, and has compelled the payment of thousands of dollars, thus increasing the rates to the honest man."

In 1894 the superintendent of insurance in Missouri, after describing the law and its effect, says: "This is simply an incentive to perjury and arson. Neither the insurance company nor the insured should be permitted to enter into such contracts. . . . The law should require that every person should help to insure his own property."

The insurance commissioner of Michigan, in 1893, warning the legislature against unhealthy legislation, says: "Among the most obnoxious of these acts on the statute books of some States, the one attempting to 'do up' the business, by what is known as the valued-policy law, stands pre-eminent as an example of legislative folly. It should be in all cases entitled, 'An act to encourage incendiarism and facilitate the business of selling out to insurance companies at inflated prices.'"

Similar quotations might be multiplied almost indefinitely. Insurance commissioners are certainly well qualified to speak, and their utterances should be accepted as made in behalf of policy-holders, rather than in the interest of policy-writers.

The proposition to amend the constitution so as to provide for biennial instead of annual elections seems to be conceded on all hands certain of adoption. This will result in the Twenty-ninth General Assembly being composed of the same men who constituted the Twenty-eighth General Assembly, and the present chief executive will be continued in office pending that session. If upon further investigation it shall be deemed wise to re-enact this bill, it will not be necessary to pass it over a veto, for it will be promptly signed. I simply avail myself of my prerogative, and resubmit the bill to the same men who originally passed it, that they, pending the delay, may make such individual investigation as may be deemed expedient, and thereafter take such action as shall to them seem wise, and for the best interest of the people of this commonwealth.

May 5, 1900.

LESLIE M. SHAW,

Governor of Iowa.

Appendix to Veto

The preceding message is followed by a synopsis of the affidavits referred to, with the statement that they are in Governor Shaw's possession subject to examination; the synopsis is too long to quote in its entirety, but the following is a condensed summary of its contents:

Sworn statement of Charles Hiller, vice-president of the Exchange Bank of Kahoka, Mo., that rates on farm property in his county have increased from 100 to 175 per cent since the enactment of the valued-policy law. Statement accompanied with itemized description of nineteen policies.

Sworn statement of J. B. Van Pappelendam, of Keokuk, Iowa, that rates on farm property in Missouri are $66\frac{2}{3}$ to $108\frac{1}{2}$ per cent higher than the same companies are willing to write the same class of risks in Iowa. Statement accompanied by itemized description of fourteen policies.

Sworn statement of E. R. Bartlett, Memphis, Mo., that farm rates have advanced 100 per cent since the enactment of the valued-policy law. Statement accompanied by an itemized description of forty-eight policies.

Sworn statement of H. D. B. Cutler, of Glenwood, Mo., that rates have advanced 100 per cent on farm property since the enactment of the valued-policy law, and that his companies are refusing to write farm risks at current rates. Statement accompanied by itemized description of thirteen policies.

Sworn statement of James M. Gray, of Glenwood, Mo., that rates on farm property are fully 100 per cent higher than previous to the passage of the valued-policy law. Statement accompanied by itemized description of twenty policies.

Sworn statement of Joseph Higbee, of Bloomfield, Mo., that rates on farm property in Missouri have advanced 100 per cent since the enactment of the law, with itemized description of thirty-four policies.

Sworn statement of Lorenzo Jones, of Unionville, Mo., that rates on farm property in his county have advanced 120 per cent since the valued-policy law was enacted, with itemized description of nine policies.

Sworn statement of W. G. Clark, of Centerville, Iowa, giving a list of fourteen policies written on farm property in Appanoose County, Iowa (adjoining Putnam County, Mo.), at rates ranging from $1\frac{1}{4}$ to 2 per cent for five years. These rates are about one-half the rates on property in the adjoining county in Missouri, as shown by the following affidavit of Beverly H. Bonfoey.

Affidavit of Beverly H. Bonfoey, of Unionville, Putnam County, Mo., stating that the rate on farm property before the enactment of the valued-policy law was \$1.40 for five years, and that now it is three per cent for five years, or an increase of over 100 per cent, and it is difficult to get any of the standard companies to write farm insurance in his state even at the present rates.

Sworn statement of Henry Toel, of Maryville, Mo., with a list of sixty-one policies, showing an increase in Missouri farm rates of over 100 per cent since the valued-policy law was enacted.

Sworn statements of eleven prominent business men of Kahoka, Mo., that rates for farm insurance in Clark County, Mo., are 100 per cent higher than prior to the passage of the valued-policy law.

Sworn statements of eleven prominent business men, bankers and county officials, at Lancaster, Mo., stating that the valued-policy law has increased farm rates 100 per cent.

Affidavit of J. D. Skidmore, of Memphis, Mo., stating that the rate on his business property has been advanced from $3\frac{1}{4}$ to 5 per cent.

Affidavit of J. E. Parish, president of the Citizens' Bank of Memphis, Mo., stating that the rate on his building has advanced from $2\frac{1}{2}$ to 5 per cent.

Affidavit of J. C. Leach, of Memphis, Mo., stating that the rate on his business building has been advanced from $1\frac{1}{4}$ to 2.10 per cent.

Affidavit of David Secord, of Memphis, Mo., that the rate of 1.00 on his business building has been advanced to 1.60 since the enactment of the valued-policy law.

Affidavit of C. E. Saunders, secretary of the Masonic lodge at Memphis, Mo., that the rate on their building has been advanced

Veto Message of Governor Shaw of Iowa 197

from 1.20 to 2 per cent since the valued-policy law went into effect. (This town built a good system of water-works about four years ago, which should have materially reduced rates.)

Sworn statement of Samuel F. Carey, president, and Howard Tucker, secretary of the Iowa State Insurance Company (a mutual company), giving a list of 571 policies in Iowa and Missouri, showing the following comparative rates for the same term and class:

	IN IOWA.	IN MISSOURI.
Farm property: six years (fire and tornado combined)-----	3	4½
Same as above (fire insurance alone)---	2 to 2½	3½
Detached frame commercial risks and contents, one year-----	1 to 1¼	2½ to 3

Affidavit of G. J. Stevenson, Tarkio, Mo., with a list of eleven policies, showing an increase in farm rates in Missouri of 66⅔ per cent since 1892. Itemized description of eleven policies.

Affidavit of J. A. Gerlach of Tarkio, Mo., with a list of seven policies, showing an increase of over 120 per cent since the passage of the valued-policy law.

Sworn statement of seven prominent citizens of Tarkio, Mo., that the rate on farm property in Atchison County is over 100 per cent higher than prior to the enactment of the valued-policy law.

Affidavit of J. F. Robertson, Burlington Junction, Mo., giving a list of twenty policies which show an increase of 66⅔ per cent in Missouri farm rates between 1886 and 1900.

Sworn statement of C. W. Crossan, of Bethany, Mo., that rates on farm property have doubled since the valued-policy law was enacted; and that rates on mercantile hazards have materially advanced since the law, although the city has erected a first-class system of water-works which should have reduced the rates 20 per cent.

Sworn statement of A. P. Kelso, of Grant City, Mo., that the rates on farm property in Harrison County have advanced 100 per cent under the valued-policy law, accompanied with list of seven policies.

Sworn statement of Ezra H. Frisby, of Bethany, Mo., that farm rates have increased 100 per cent since 1889.

Sworn statement of P. B. Sigler, of Bethany, Mo., with a list of

policies, showing an increase of 100 per cent in farm rates since 1889.

Affidavit of P. B. Lyons, of Albany, Mo., showing difference in rates on mercantile property in Albany, with a full description of risks and exposures, and indicating an advance in rates of more than 60 per cent since 1889.

Statements of Ed. S. Gibbany, J. W. Perry, M. G. Ratcliffe, and F. M. Humphrey, of Albany, Gentry County, Mo., that farm rates in that county have advanced 100 per cent since the passage of the law, and that they believe this increase in rates has been induced in a great measure by the pernicious influence of the valued-policy law, which, in their judgment, instead of being a protection to the assured, sets a high premium on dishonesty, increasing the loss ratio, and consequently the rates of fire insurance.

Affidavit of Frank Hooker, cashier of the First National Bank of Blanchard, Page County, Iowa, stating that the town of Blanchard is divided by the state line between Missouri and Iowa, and that rates in Missouri, on the south side of the street, are two and a half times as much as they are on the north side of the street, in Iowa.

Sample Flour-Mill Schedule

Standard Flour-Mill

MILL BUILDING.—Not more than ten thousand square feet in any one floor not more than four stories high, exclusive of basement and Texas; substantial brick or stone walls, ledged or buttressed for joists or floor timbers to rest upon; framework, mill construction; floors double, with all elevator openings automatically hatched or boxed up, with automatically closing doors. Stair openings in floors to be protected by inclined drop doors held in place by fusible links. Roof, metal, slate, or composition; cornice, brick, stone, or metal. No sheathing or ceiling at sides or overhead, and all woodwork whitewashed or painted with fireproof paint. All outside doors and windows to be provided with standard metal or metal-clad shutters, when exposed.

MACHINERY AND PROCESS.—Release valve over the discharge spouts of all close conveyors; patent dust collectors; elevator heads hopped. No cleaning machinery, dust-room, corn-sheller or grain-dryer, corn-cracker, feed-mill machinery, oat-clipper, or appliances for manufacturing rolled oats, flakes, or hominy in the mill.

CAPACITY.—Not to exceed one thousand barrels in twenty-four hours continuous run.

HEATING AND LIGHTING.—*Heating*—The mill shall be heated by a properly installed hot-water system, steam or by hot-air blast.

Lighting—By incandescent electric lights, the installation being in conformity with the rules and requirements of the latest revision of the electrical code.

PROTECTION.—Must be situate under the protection of a city fire department and water supply. Thermostat alarms on all heavy bearings running two hundred revolutions per minute, in all elevator heads and bolting chests, and to each hundred square

feet of ceiling space, all connected with the A. D. T. or city alarm system, and with alarm in the mill engine-room.

FORCE PUMP.—For fire protection only, of not less than five hundred gallons per minute capacity, so located that it can be operated from both inside and outside the mill building.

STANDPIPE.—Not less than two inches, with sufficient one and a half inch cotton rubber-lined hose connected on each floor to reach around machinery to all parts of the floor, and with a fifteen-inch nozzle attached, the tip of which shall not be less than three-quarters of an inch; ample water supply for at least a three-inch standpipe.

BARRELS AND PAILS shall be placed on each floor so as to have one forty-gallon cask of salted water and two fire pails to each twenty-five hundred square feet of floor space or major fraction thereof.

POWER.—Water, cable, shaft or steam, when boilers are located in a standard boiler-house, situate detached twenty-five feet or more from mill, with continuous clear space between.

BASIS RATE..... \$1 75

BUILDING CHARGES.

- | | | |
|---|--------|------|
| 1. Brick-veneered slate or iron clad building | \$0 15 | .... |
| 2. Frame building | 25 | .... |
| 3. Walls not ledged or buttressed..... | 10 | .... |

ROOF CHARGES.

- | | | |
|--|----|------|
| 4. Mansard roof | 10 | .... |
| 5. Shingle roof protected with two coats fireproof
paint when steam-power..... | 15 | |
| 6. Shingle roof unprotected, steam-power | 25 | .... |
| 7. Shingle roof protected with two coats fireproof
paint, water-power mill..... | 05 | |
| 8. Shingle roof unprotected, water-power mill..... | 10 | .... |

INTERIOR CHARGES.

- | | | |
|---|------|------|
| 9. Sheathing on sides or overhead, one cent per five
hundred square feet for concealed space (no
charge less than fifteen cents)..... | | |
|---|------|------|

Sample Flour-Mill Schedule

201

10. Stair and elevator openings not automatically hatched or boxed, for each opening	02	....
11. Single or not standard floors	05	....
12. Woodwork not kept painted with fireproof paint or whitewashed	10	....
13. Each story above four exclusive of basement and texas	05	....
14. Each two thousand feet area over ten thousand feet	02	....
15. Brick chimney in mill (for heating stoves only), two cents. If on brackets	05	....
16. Tile or iron chimney in mill (for heating stoves only)	50	....
17. Charge for lack of standard shutters on exterior openings when exposed within fifty feet, each opening	02	....
No charge less than ten cents .....	....	....
18. Wood cornice on other than frame mill	05	....

MACHINERY CHARGE.

19. Each feed-mill, feed-roll, corn-sheller, corn-cracker, or oat-clipper	15	....
20. Cleaning machinery (for each cleaning machine, maximum charge not to exceed fifty cents)	05	....
21. Dust-room with outside ventilation	15	....
22. Dust-room with no outside ventilation	25	....
23. Each balloon or cloth dust-room (cyclone and tubular collectors, no charge)	20	....
24. No release valves on tight conveyors, each	01	....
25. Absence of drip pans under main and counter-shaft bearings, each	01	....
26. Elevator heads not hopped	25	....
27. Grain-dryer or oat-kiln, each	25	....
28. Boiler in mill building or basement, in brick and brick-arched fireproof room and brick stack	1 00	....
29. Boiler in mill building in boiler-room not standard, brick stack	1 25	....
30. Iron stack through each wood partition, floor or shingle roof	25	....

31. Iron stack through metal, slate or composition roof	10	....
32. Each floor where machinery is crowded	10	....
33. Lack of dust collectors (each floor or room)	05	....

STANDARD BOILER-ROOM.

Brick or stone walls not less than sixteen inches thick, from stone foundation not less than twenty inches thick, or bed rock. One story without attic or decking, and of sufficient height to afford a clear space of not less than eight feet between top of boilers and roof. Roof iron on iron trusses, or rafters, or brick arch. Floor—earth, cement, stone, iron, or brick. Door and window frames and sills, iron or approved metal-clad; shutters to all doors and windows the same. Stack—brick. Fuel-house, bins, or bunkers outside. Situate detached at least twenty-five feet from mill.

CHARGES FOR DEFECTS.

34. Each four-inch less than sixteen inches thickness in brick walls	\$0 02	....
35. Brick-lined or iron-lined boiler-house, cut off on side next to mill by standard wall, rising at least eighteen inches above roof	10	....
36. Brick-veneered iron or slate clad boiler-house, cut off on side next to mill by standard wall	15	....
37. Openings on mill side in standard wall not protected by approved fire doors or shutters, each	10	....
38. Frame boiler-house	35	....
39. Unprotected wood in roof, two cents for each foot less than eight feet from boilers or breeching	....	....
40. Metal, slate, or composition roof on wood rafters	05	....
41. Shingle roof	25	....
42. Lack of texas or ventilation if 40 or 41 are charged	05	....
43. Brick stack through roof No. 40	02	....
44. Brick stack through roof No. 41	05	....
45. Metal stack through roof No. 40, eight inches clear space, ten cents. Each inch less than eight inches, five cents additional	....	....

Sample Flour-Mill Schedule

203

46. Metal stack through roof No. 41, eight inches clear space, twenty-five cents. Each inch less than eight inches, five cents additional .....	....	....
47. Absence of spark arrester when fuel is other than coal, crude oil, or gas, if shingle roof on mill....	10	....
48. Other than non-combustible floor.....	05	....
49. Each five feet less twenty-five between standard boiler-house and mill.....	01	....
50. Each five feet less than twenty-five between brick boiler-house, not standard, and mill	02	....
51. Each five feet less than twenty-five between brick-veneered, brick or iron-lined boiler-house and mill	03	....
52. Each five feet less than twenty-five between frame boiler-house and mill	05	....
53. Storage of soft coal or slack	05	....
54. Storage of hard coal or wood	01	....
55. Charge for ceiling or sheathing, fifteen cents.....	....	....
56. If sawdust, shavings or tan bark used for fuel.....	10	....
57. If gasoline-power, apply items 3, 4, 5, 6, and 7 of gasoline-power elevator schedule.....	....	....

CAPACITY.

58. Each hundred barrels in excess of one thousand barrels.....	01
---	----	------

FIRE PROTECTION.

59. No thermostat, standard and as per specification..	10	....
60. No special fire-pump.....	25	....
61. Special fire-pump not standard.....	15	....
62. No standpipe or hose.....	10	....
63. Standpipe or hose not standard	05	....
If standpipe has not city pressure or gravity pressure so as to be available for effective service at all times, and steam is not at all times maintained so as to operate the force pump, charge 61 and 63		
64. Each twenty-five hundred feet floor space or major fraction thereof not supplied with a barrel of salt water and two fire-pails.....	10	....

65. Lack of public or city water system	10	....
66. Lack of fire department	10	....
67. No watchman when mill is not running	15	....
68. No watch-clock (if watchman is employed)	10	....
69. No safety waste cans	10	....
70. No fire axes.....	02	....

HEATING AND LIGHTING.

Heating.

71. Wood or soft coal stoves, each.....	10	....
72. Hard coal stoves, each	05	....
73. Stovepipe passing through floor, partition or wood- work, for each	05	....
74. Steam pipes on metal brackets less than one and a half inches from unprotected woodwork.....	05	....
75. Steam pipes passing through or behind bins, wood- work or concealed spaces	10	....
76. Overhead suspended steam pipes within four inches of unprotected woodwork.....	10	....
77. All stoves or steam pipes not readily accessible so as to be cleaned frequently.....	05	....

Lighting.

No open lights allowed.

78. Arc lights, globes closed at bottom and approved wire screen on top.....	25	....
79. Approved oil lanterns	05	....

If electric plant for other than lighting mill, if switchboard and wiring is standard, twenty-five cents; if switchboard and wiring is not standard, charge at discretion, but minimum charge fifty cents; dynamo in engine-room for lighting mill only, no charge.

Incandescent electric light, no charge.

Cold-blast tubular mill lanterns, no charge.

Total

Sample Packing-House Schedule

Standard Packing-House or Warehouse

MATERIAL.—Brick or stone; size, 100x100 feet; height, three stories and basement, or not over 40 feet; roof, metal.

WALLS.—To be 20, 16, 12 inches, ledged, for joists or timbers to rest upon; or 24, 20, 16, when not ledged; and to be built up at least three feet above the roof on all sides.

PARTY WALLS.—Must be four inches thicker. Walls cracked or otherwise defective, or having wood laid therein, to be charged for in addition to other charges.

SPECIFIC RATINGS.—Shall not be made on any portion of the plant under same roof, or which is not a separate and distinct building.

DIVISION WALLS.—When of standard thickness, and all openings provided with standard doors as hereafter described, such walls may be considered as making a separate building, entitling it to a specific rate.

OPENINGS.—Outside must be covered with substantial iron doors, or wood metal-covered doors, not over two years old and in good order; on both sides of the walls the caps, sills and frames must be brick, stone or iron; the sills at least one inch above the floor.

DOOR.—If iron, should be of a modified iron safe pattern, heavy frame, covered with heavy boiler iron, stayed crosswise with angle or T iron to prevent warping by heat; the iron covering should project over the frame far enough to completely cover the opening.

If *wood*, the wood should be hard, tongued and grooved; at least one inch thick; two, or if the opening is large, three thicknesses laid crosswise diagonally, securely fastened together and covered with heavy galvanized iron securely fastened to the wood

with *wrought-iron nails*, long enough to pass *through* the wood and *clinch outside similar iron sheathing* on the *other* side of the door. The iron covering the ends and edges of the door should be long enough to lap over on the sides and be fastened in the same manner, and made as nearly airtight as possible. All doors to be closed when work ceases for the day.

HINGES, LATCHES AND FASTENINGS.—Must be thoroughly imbedded in the wall; the straps of the hinges should be long and strong enough to prevent the door from sagging, and fastened by bolts through the door, having nuts on opposite side. A better hanging is to support the door upon an inclined rail over the door, that it may quickly slide into place and close itself.

The doors that swing should not be blocked by anything, but the swinging area always kept clear. Doors should be large enough to lap well over the entire opening, tops, sides and bottom. To do the latter, the sill should be at least one inch above the floor.

WOOD LINTELS, SILLS AND CASINGS.—In openings must be charged for as if no door.

COMPARTMENTS.—For slaughtering, rendering, smoking, fertilizing or cooling shall be entirely cut off from each other by standard walls, and all openings covered with standard doors as above described on both sides of the wall.

SMOKE-HOUSES.—To be well and substantially built, walls to be not less than standard; roof to be metal on iron rafters, no wood; iron ventilators in roof; an iron floor on iron girders, at least ten feet above fire floor; an iron frame to support meat; iron doors to cover all openings; no openings to main building.

RENDERING AND FERTILIZING TANKS.—To be safely put up, with sufficient space or other non-combustible protection to prevent contact with wood.

CUPOLA OR TEXAS IN ROOF.—To be well and substantially built, all wood to be covered with galvanized iron fastened on with wrought-iron nails, long enough to pass through wood and clinch on opposite side.

STANDPIPE.—To be at least 2½ inches clear diameter, and reaching from first floor to above roof, with connection for fire-engine attachment outside, and at least 50 feet of hose on each

floor. Where connections can be made with water-works it must be so done.

FORCE PUMPS.—With capacity of at least 250 gallons per minute, with a separate boiler having steam always ready for use, and at least 250 feet of hose.

BUCKETS AND CASKS.—Filled with salted water, properly covered to prevent evaporation, to be placed at or near the head of each stairway and on each floor, one cask and one bucket to every 500 square feet of floor surface.

STEAM.—For extinguishing fire, pipes to be arranged to put a volume of steam into every compartment of the plant for the purpose of putting out a fire.

WATCHMAN.—To be on duty at all times, including nights, Sundays and holidays, with approved watch-clock and stations in each compartment.

LIGHT.—Electricity.

WHITEWASH.—Buildings to be thoroughly whitewashed throughout at least once each year.

SMOKING.—Tobacco; none to be permitted on premises.

SKYLIGHT.—Thick glass in iron frame.

DEBRIS.—Rubbish, straw, shavings, greasy clothing or rags prohibited.

BOILER-HOUSE.—To be brick or stone; iron roof on iron rafters; not over one story high; non-combustible floor; no communication with main building; brick stack, or metal stack on brick base, rising at least ten feet above the highest point of main building; boilers to be incased in brick or equivalent; coal fuel; ventilator in roof to be one-half the area of boilers.

Bldg. Stock.

BASIS RATE.—For packing-house or warehouse..... **\$0 75**

1. Area.—For each additional 5,000 square feet, add. **\$0 10**
2. Roof.—Composition on B or BV, add..... **10**
3. Shingle on B or BV, add..... **25**
4. Height.—For each story above three, add..... **10**
5. Cupola or Texas in roof, add..... **10**
6. Skylight.—If not in iron frame, add **05**
7. Walls.—If not standard, each wall add..... **05**
8. If party walls, each wall add **10**

9. If cracked or otherwise defective, for each wall add	05	....
10. Openings.—If no standard doors as required, for each add	10	....
11. If doors on one side of the wall only, for each add.	05	....
12. If not in good order, for each add	05	....
13. If wood caps, sills or casings, add	05	....
14. If not as required, add	10	....
15. Shutters.—Outside, if none, add for each wall	05	....
16. If not standard, for each wall add	05	....
17. Lights.—If coal oil, add	10	....
18. If candles, open lights or torches, add	25	....
19. Casks and Buckets.—If not as required, for each floor add	05	....
20. Steam Pipes.—For putting out fires, if not as required, add	10	....
21. Force Pumps. — (City water-works) and hose, if not as required, add	05	....
22. Watchman with clock, if not as required, add	05	....
23. Whitewash.—If building not whitewashed within a year, add	10	....
24. Smoke-House.—If not cut off from main building by wall or standard door, add	15	....
25. If no iron doors as required, add	05	....
26. If no iron roof and ventilator, add	05	....
27. If walls not built as required, add	10	....
28. If supports for meat other than iron, add	10	....
29. If no iron floor above fire, add	10	....
30. Rendering or Fertilizing Tanks.—If not protected as required, for each add	05	....
31. Occupancy.—Smoking, add	10	....
32. Canning, add	10	....
33. Fertilizing, add	10	....
34. Oleomargarine or butterine, add	10	....
35. Lard refining, add	20	....
36. Rendering, steam, add	10	....
37. If tanks not protected from wood, add	05	....
38. Open rendering kettle, add	25	....
39. Boiler-House.—Brick with slate, tin or gravel roof, add	05	....

Sample Packing-House Schedule 209

40. Brick, shingle roof, add.....	10	....
41. Frame, metal roof, add	25	....
42. Frame, shingle roof, add	50	....
43. Roof, other than iron, less than 5 feet above boiler, add	05	....
44. No ventilator half area of boilers, add.....	05	....
45. Iron stack through other than iron roof, add.....	10	....
46. Iron stack on brick base, add	05	....
47. Wood fuel, add	10	....
48. Opening into brick main building, no standard door, add	25	....
49. No force pump, with 250 feet 2-inch hose, add	10	....
50. Not whitewashed, add	05	....
51. Boiler in main building, add.....	1 00	....

Credit to be given only when the improvements are fully completed.

Part Brick and Part Frame, or BV.—For basis rate and other charges, to the charge for brick, add one-half the difference between basis rate and other charges, for brick and frame.

FRAME.—Double the basis rate, and double all other items of charge except for shutters, doors and shingle or gravel roof, which may be omitted.

EXPOSURES.—Where risks are exposed by other buildings an additional charge to the schedule rates must be made, as per following rule:

If less than 10 feet.....	add 50 per cent exposure rate.
10 feet and less than 20.....	add 45 per cent exposure rate.
20 feet and less than 30.....	add 40 per cent exposure rate.
30 feet and less than 40.....	add 35 per cent exposure rate.
40 feet and less than 50.....	add 30 per cent exposure rate.
50 feet and less than 60.....	add 25 per cent exposure rate.
60 feet and less than 70.....	add 20 per cent exposure rate.
70 feet and less than 80.....	add 15 per cent exposure rate.
80 feet and less than 90.....	add 10 per cent exposure rate.
90 feet and less than 100.....	add 5 per cent exposure rate.

Exposure rate is the rate of exposing building, as detached or unexposed.

Where two or more risks in the same direction are contiguous, charge for exposure upon the aggregate rates, for the average distance.

When buildings have standard doors and shutters on all openings toward an exposing building, or such building is at least 100 feet distant, no charge for exposure need be made.

Sample Planing-Mill Schedule

(NO SASH, DOOR, OR BLIND WORK)

Standard Risk

MILL BUILDING.—One story, brick or stone; roof, metal on metal rafters (no woodwork); all interior woodwork whitewashed or painted with fireproof paint; kept clean; no open lights; all doors to be approved fireproof; lumber dressing only; all planers provided with blowers and metal conveyors; main conveyors to be provided with automatic cut-off between mill and shavings vault; shafting to be hung overhead; sheds not to extend more than twenty-five feet from mill in any direction, to be roofed with metal or composition, and woodwork to be thoroughly painted with fireproof paint or whitewashed; no other sheds or lumber within one hundred and fifty feet; no dry-kiln exposure; force pump (or city water-works) and three hundred feet of two and one-half inch hose, specially for fire-extinguishing purposes, with ample water supply.

BOILER-HOUSE.—Brick or stone; iron roof or iron rafters (no woodwork); boilers covered with at least four inches of masonry, earth, or cement; brick stack; no communication with mill except protected by approved fireproof doors.

SHAVINGS VAULT.—Brick or stone; disconnected from mill building, with brick-arched or metal roof; the opening into boiler-house at least four feet above level of boiler-house floor, and protected by iron door; no direct communication with the mill.

BASIS RATE..... **\$2 25**

MAIN BUILDING.

- | | | |
|--|--------|------|
| 1. Add for frame building..... | \$1 00 | .... |
| 2. Add for brick-veneered or iron-clad building..... | 60 | .... |
| 3. Add for iron-lined or brick-lined building | 40 | .... |

4. Add for each story above one.....	20	....
5. Add for metal, slate, or composition roof on wood or wood rafters.....	10	....
6. Add for shingle roof, covered with at least two coats of good fireproof paint.....	20	....
7. Add for shingle roof, ordinary.....	30	....
8. Add for interior woodwork not whitewashed or painted with fireproof paint.....	10	....
9. Add for want of cleanliness, discretionary, but not less than.....	25	....
10. Add for lights, other than gas or electric	10	....
Note—Open lights strictly prohibited.		
11. Add for absence of fireproof doors between mills and sheds, or for defective doors.....	10	....
Note—This charge is not made when building is frame.		
12. Add for each planer not provided with metal blower.....	20	....
13. Add for absence of automatic cut-off in main con- veyor.....	10	....
14. Add for wood conveyors in whole or in part	10	....
15. Add for sheds extending more than twenty-five feet from mill, discretionary.....	....	....
16. Add for wood or shingle roof to sheds.....	20	....
17. Add for exposure, discretionary.....	....	....
18. Add for no sprinklers or casks of water on wood roof	20	....
19. Add for no watchman	20	
20. Add for watchman, but no watch-clock.....	10	....
21. Add for heated by stoves, well protected	20	....
22. Add for shaft with boxes under floor	50	....
23. Add for no standpipe and hose when building is two or more stories.....	50	....
BOILER-HOUSE.		
24. Add for brick-lined or iron-lined	40	....
25. Add for frame or veneered	75	....
26. Add for metal or composition roof, on wood or wood rafters	10	....

Sample Planing-Mill Schedule

213

27. Add for shingle roof covered with at least two coats of good fireproof paint	20	....
28. Add for shingle roof, ordinary.....	30	....
29. Add for deficient or defective covering to boilers..	05	....
30. Add for metal stack, with good jacket, passing through floors or roof with woodwork.....	50	....
31. Add for metal stack, without good jacket, passing through floors or roof with woodwork.....	75	....
Note—Metal stack on brick base, rising five feet above roof or boiler-house, no charge; if less than five feet, or on insufficient base, charge same as metal. No charge to be made for metal stack through roof without woodwork.		
32. Add for no spark arrester on metal stack	25	....
33. Add for openings between mill and brick, or brick-lined boiler-house not protected by approved fireproof doors	25	....
Note—Belt-holes are "openings" if more than two inches wide, and shaft-holes, if more than double the sectional area of the shaft.		
34. Add for woodwork in boiler-house roof within eight feet of boiler or between the sides and the brick arch within four feet, add for each foot less....	20	....
35. Add for no force pump (or city water-works), and three hundred feet of two and one-half inch hose specially for extinguishing fires	50	....
36. Add for force pump and hose intended for fire purposes, but deficient in location, power, or otherwise	25	....

SHAVINGS VAULT.

37. Add for no shavings vault	1 25	....
38. Add for wooden shavings vault	1 00	....
39. Add for veneered, iron-clad or iron-lined shavings vault	85	....
40. Add for brick-lined shavings vault with no interior woodwork in sides, doors, or roof, first-class of its kind.....	50	....

41. Add for brick or stone, with metal, slate, or composition roof on wood.....	60	....
42. Add for brick or stone, with shingle roof	75	....
43. Add for opening from vault to boiler-house protected by other than good fire-door.....	10	....
44. Add for opening from vault to boiler-house not protected by any door	25	....
45. Add for opening from vault to boiler-house not less than four feet above boiler-house floor, with door well protected, each foot less.....	05	....
46. Add for vault <i>adjoining</i> or communicating <i>directly</i> with mill, protected by approved fireproof doors, otherwise standard vault.....	15	....
47. Add for vault adjoining or communicating directly with mill, not protected by approved fireproof doors, discretionary, not less than	25	....
48. Add for any vault, other than standard, when it <i>adjoins</i> or communicates <i>directly</i> with mill, whether protected by fireproof doors or not.....	40	....

DEDUCTIONS.

49. For live-steam jet in shavings vault	25	....
50. For approved automatic sprinklers in mill and vault	15 per cent.	
51. For approved mercurial alarm.....	5 per cent.	

Sample Classification List

Directions

BRICK BUILDINGS include adobe and brick-veneered buildings, with metal, slate, or composition roof.

FRAME BUILDINGS include brick-veneered with shingle roof, and metal or corrugated-iron-clad buildings.

FIREPROOF BUILDINGS include modern construction brick, skeleton steel, and brick or terra cotta, buildings with arched floors, and all other strictly fireproof buildings.

PROTECTED AND UNPROTECTED.—These words refer exclusively to the protection of public fire departments, and not to sprinklers or other internal devices, as a sprinklered plant situated under fire department protection is proportionately benefited to the same extent as an ordinary risk. For this reason sprinklered risks are referred to as "protected" or "unprotected."

A protected risk is one situated under the protection of a fire department of the first, second, or third class, as described in state board schedules. *All other risks are classed as unprotected.*

SPRINKLERED.—All sprinklered risks should be classed under the head of Sprinklered Risks (See X) instead of under the class they would belong to if not sprinklered.

BUILDERS' RISKS include buildings under process of construction, insured for owner or builder. When written for owner for regular terms, with permit to complete and occupy, they should be classed with the occupancy indicated.

DUAL OCCUPANCIES.—Buildings having more than one occupancy should class under the occupancy of the highest physical hazard. This does not apply in case the highest physical hazard is a Minor Industry (See Y. 5), or in case of small amount of hand-work connected with mercantile stocks.

FURNITURE AND FIXTURES should be classed according to

the nature of building occupancy. Bank and office furniture and fixtures (including lawyers' and doctors' libraries), and postoffice furniture and fixtures, when in buildings used for no other purpose, should be classed with retail buildings as Non-Preferred (See A. 4. 7). When contained in buildings used for mercantile or manufacturing purposes, they should take the class of the building in which they are situated, according to its occupancy.

REINSURANCE PREMIUMS, as well as additional premiums or return premiums for cancellation or rebates, should be entered under the class to which the risk belongs. When one or more policies are written on same risk, the notation of class on daily report should be underscored or otherwise designated, so that it will not be counted as an additional risk. When a risk is reinsured in several policies, the insignia should be underscored in the same way, so that the policies will not be counted as additional risks. Additional premiums, rebates, and reinsurance should be indicated in the same way, so they will not be counted as additional risks.

POLICIES CANCELED FROM DATE.—When a policy is canceled from date, if it does not appear in account, the class number should be erased, so it will not be entered as an additional risk. If the policy appears in account, and the full return premium has been charged back, both the original risk and cancellation should be entered in classification records.

Classification of Mercantile and Storage Buildings and Contents

Mercantile and storage buildings and contents class, according to occupancy, under three heads, as follows:

1. *Preferred*, embracing all risks where the contents are not especially combustible or susceptible to damage.
2. *Hazardous*, embracing all risks where the contents are easily ignited, difficult to extinguish, and liable to generate conflagrations, or to do heavy damage to buildings.
3. *Non-Preferred*, embracing all risks where the contents are especially liable to damage from fire, water, smoke, handling, or exposure to the elements, though not necessarily more inflammable than property of the preferred class.

Alphabetical List of Preferred and Hazardous Mercantile
Risks

All mercantile or storage risks not found in the following list should be classed as Non-Preferred.

P. indicates Preferred, H. indicates Hazardous.

Risks which have a special class are indicated by their class letter and figure.

P. Agricultural implements. (When insured with retail lumber-yards see A. 11.)

A. 19. Alcohol.

A. 24. Animal oils.

Y. 3. Auction-house stocks.

P. Bag and bagging stocks.

Y. 3. Bankrupt stocks.

A. 13. Bark-yards.

H. Benzine.

P. Bicycle stocks.

P. Boots and shoes.

A. 18. Broomcorn, baled.

P. Brush stocks.

A. 11. Building materials (when insured with retail lumber yards).

P. Burlap stocks.

P. Canned goods.

P. Caoutchouc (crude rubber).

H. Carbide (in packages).

P. Carpet and oilcloth stocks.

P. Carriage, wagon, and auto-motor vehicle stocks.

H. Celluloid and zylonite.

P. Clothing (not manufacturing).

P. Cloths and cloak stocks.

A. 12. Coal-yards and coal-docks (wholesale).

A. 11. Coal-yards (retail).

A. 25. Cold storage, including butter, eggs, vegetables, fruits, meats, poultry, and other perishable stocks.

A. 21. Cordage stocks.

- A. 13. Cordwood.
- A. 15. Corn in cribs in towns.
- P. Corsets.
- A. 24. Cottolene.
- A. 16. Cotton in compresses and yards.
- A. 17. Cotton on R. R. platforms.
- A. 21. Cotton in W. H. (no compressing).
- A. 30. Cotton in transit.
- P. Cotton goods.
- A. 24. Cotton-seed oil.
- P. Country stores.
- A. 9. Department stores.
- A. 7. Drugstores (wholesale).
- A. 8. Drugstores (retail).
- P. Dry-goods.
- H. Earth oils, kerosene, gasolene, etc.
- P. Fabrics in original packages, knit and woven (except laces and silk stuffs).
- A. 21. Fiber stocks (baled), jute, tow, hemp, oakum, flax, manila, sisal, esparto, and malta grass, also cotton storage (no compressing).
- H. Fireworks and other explosives.
- A. 24. Fish oils.
- H. Fixed ammunition.
- A. 31. Floating risks (property in several localities).
- P. Flour and provisions.
- P. Furs and pelts in unbroken packages.
- P. Gas fixtures.
- H. Gasolene.
- P. General merchandise stocks.
- A. 28. General storage warehouses, public and transportation.
- P. Gents' furnishing goods.
- A. 14. Grain in elevators and warehouses.
- A. 24. Grease stocks.
- P. Groceries.
- P. Gunny cloth and bag stocks.
- P. Gutta-percha goods.
- P. Harness and saddlery.

- A. 23. Hay and straw storage (baled).
- P. Hats and caps.
- P. Heavy iron stocks.
- A. 21. Hemp (baled).
- P. Hides.
- A. 19. High wines.
- P. Hosiery and thread.
- A. 27. Household furniture, stored.
- A. 26. Ice-houses and ice.
- P. India-rubber goods.
- A. 22. Junk stocks.
- A. 21. Jute (baled).
- H. Kerosene (see Earth Oils).
- A. 24. Lard oil.
- P. Leather stocks.
- A. 24. Linseed oil.
- A. 24. Lubricating oils.
- A. 10. Lumber (wholesale).
- A. 11. Lumber (retail).
- P. Machinery stocks (heavy).
- H. Matches.
- P. Mattings.
- A. 28. Merchandise, mixed, general storage warehouses.
- A. 29. Merchandise in transit (other than cotton).
- P. Merchant-tailor stocks.
- H. Naphtha.
- A. 24. Neatsfoot oil.
- A. 24. Oils (vegetable, animal, fish, and lubricating) and grease stocks.
- H. Paints and varnishes.
- P. Plated and silver ware.
- P. Plow stocks.
- P. Pump stocks (metal).
- A. 22. Rags.
- A. 22. Rigging lofts.
- A. 21. Rope stocks.
- H. Rosin, tar, and turpentine.
- P. Saddlery.

- P. Safes, stocks of.
- Y. 3. Salvage stocks.
- P. Scales and safes.
- P. Sewing-machines.
- A. 10. Stave and heading yards.
- P. Stove stocks.
- H. Ship chandlers' and naval stores.
- A. 13. Tanbark-yards.
- H. Tar.
- A. 20. Tobacco storage (in packages).
- A. 29. Transit risks (merchandise in transit other than cotton).
- H. Turpentine.
- A. 21. Twine stocks.
- P. Typewriting machines.
- H. Varnishes.
- A. 24. Vegetable oils.
- P. Vehicle stocks, carriages, wagons, etc.
- A. 28. Warehouses (transportation and general storage).
- A. 19. Whisky, alcohol, and high wines.
- H. Wooden and willow ware.
- A. 11. Wood-yards (retail).
- P. Wooden goods.
- P. Yarns in original packages.

Mnemonic Symbols

GROUP 1.	GROUP 2.	GROUP 3.
□ Buildings.	○ Brick.	△ Protected.
□ Contents.	+ Frame.	▽ Unprotected.

EXPLANATIONS.

In the following list, each class is designated by a letter and numeral. The above symbols may be used to subdivide any given class to cover the particular property indicated by the symbol or symbols used. The letter and numeral with symbol, if any, constitute the *insignia* of the class.

When no symbol appears with an insignia, it indicates that the class embraces the property indicated by all of the symbols.

Each symbol used excludes the property indicated by the other symbol of its group, thus:

\square	Excludes \square	or vice versa.
\circ	Excludes $+$	or vice versa.
\wedge	Excludes \vee	or vice versa.
$\square \circ$	Exclude $\square +$	or vice versa.
$\square \wedge$	Exclude $\square \vee$	or vice versa.
$\circ \wedge$	Exclude $+ \vee$	or vice versa.
$\square \circ \wedge$	Exclude $\square + \vee$	or vice versa, etc.

The symbols should appear in the order of the groups, i. e., a symbol of Group 1 before a symbol of Group 2, and a symbol of Group 2 before one of Group 3. When no symbol of Group 1 is used, a symbol of Group 2 should precede one of Group 3.

EXAMPLES.

A. 1. \square : Indicates *buildings* of Class A. 1., whether brick or frame, protected or unprotected.

A. 2. \square : Indicates *stocks* of Class A. 2., in brick or frame buildings, protected or unprotected.

A. 2. $\square \circ \wedge$: Indicates *buildings, brick, protected*, of Class A. 2.

A. 2. $\square + \vee$: Indicates *contents of frame buildings unprotected*, of Class A. 2.

B. 19. \wedge : Indicates *protected risks*, buildings and contents, brick and frame, of Class B. 19.

B. 19. \vee : Indicates *unprotected risks*, buildings and contents, brick and frame, of Class B. 19.

Grouped List

Non-Industrial

MERCHANDISE.

Preferred—wholesale.

A. 1. □; A. 1. □

Preferred—retail.

A. 2. □ ○ ∧; A. 2. □ + ∧; A. 2. □ ○ ∨; A. 2. □ + ∨

A. 2. □ ○ ∧; A. 2. □ + ∧; A. 2. □ ○ ∨; A. 2. □ + ∨

Non-Preferred—wholesale.

A. 3. □; A. 3. □

Non-Preferred—retail.

A. 4. □ ○ ∧; A. 4. □ + ∧; A. 4. □ ○ ∨; A. 4. □ + ∨

A. 4. □ ○ ∧; A. 4. □ + ∧; A. 4. □ ○ ∨; A. 4. □ + ∨

Hazardous or Extra Combustible—wholesale.

A. 5. □; A. 5. □

Hazardous or Extra Combustible—retail.

A. 6. □; A. 6. □

Drugstores—wholesale without compounding. (For manufacturing druggists and chemists, see S. 1.)

A. 7. □; A. 7. □

Drugstores—retail.

A. 8. ∧; A. 8. ∨

City department stores. (General merchandise in small towns, class as Preferred, see A. 2.)

A. 9. □; A. 9. □

Wholesale lumber-yards, including mill-yards, staves and heading.

A. 10. ∧; A. 10. ∨

Retail lumber, coal and wood yards, also building materials and agricultural implements insured in connection with retail lumber-yards.

- A. 11. \wedge ; A. 11. \vee
Wholesale coal-yards and coal-docks.
- A. 12. \wedge ; A. 12. \vee
Cordwood and bark not exposed by mills or tanneries.
- A. 13. \wedge ; A. 13. \vee
Grain warehouses and elevators. (When on farms, see C. 3.)
- A. 14. \square ; A. 14. \square
Corn in crib in towns or near railroad station. (Corn in crib on farms, see C. 3.)
- A. 15.
Cotton compresses and contents, including sheds and yards attached thereto or exposed thereby.
- A. 16. \wedge ; A. 16. \vee
Cotton on railroad platforms.
- A. 17. \wedge ; A. 17. \vee
Broomcorn storage—baled. (Broomcorn on farms, see C. 4.)
- A. 18. \wedge ; A. 18. \vee
Whisky, alcohol and high-wine storage. (With rectifying, see K. 3.)
- A. 19. \wedge ; A. 19. \vee
Tobacco storage (in packages).
- A. 20. \wedge ; A. 20. \vee
Baled fiber stocks, consisting of jute, hemp, tow, flax, oakum, manila, sisal, esparto and malta grass, also cotton (where no compressing is done), rope, twine and cordage stocks.
- A. 21. \wedge ; A. 21. \vee
Junk stocks and rags, rigging lofts.
- A. 22.
Hay and straw storage (baled).
- A. 23.
Oil storage, including tanks (vegetable, animal and fish), grease stocks, including lard, linseed, cottonseed, olive, castor, fish, whale and neat's-foot oil, lubricating oils and axle-grease stocks. (For coal oil, see A. 5. and A. 6.)
- A. 24.
Cold storage, including storage of butter and eggs, poultry, meats, fruit, vegetables and other perishable stocks.
- A. 25. \wedge ; A. 25. \vee

Ice-houses and contents.

A. 26.

Household furniture, storage warehouses, and stored household furniture.

A. 27. \wedge ; A. 27. \vee

General storage, including mixed merchandise, goods in railroad, steamship and general storage warehouses.

A. 28. $\circ \wedge$; A. 28. $+\wedge$; A. 28. $\circ \vee$; A. 28. $+\vee$

Merchandise in transit (other than cotton), not part of general form covering R. R. or transportation lines.

A. 29.

Cotton in transit, not part of general form covering R. R. or other transportation lines.

A. 30.

Floating risks (grain and other merchandise located in several localities).

A. 31.

Shelter and Avocational Risks

B. URBAN COMMUNITY RISKS.

Town dwellings, flats, apartment buildings, private stables and contents insured with dwellings.

B. 1. \wedge ; B. 1. \vee

Private stables in towns, when insured separately from dwelling property.

B. 2. \wedge ; B. 2. \vee

Livery, veterinary, breeding, feeding, training, sale, teamsters' and hotel stables and stables connected with express and transportation lines or with business or manufacturing establishments.

B. 3. \wedge ; B. 3. \vee

Stockyards and feeding-pens and live-stock therein.

B. 4.

Clubhouses, city.

B. 5.

Saloons, eating, drinking, and billiard, bowling alleys, restaurants and beer gardens.

B. 6. \wedge ; B. 6. \vee

Hotels, taverns, boarding and lodging houses.

B. 7. \wedge ; B. 7. \vee

Theaters and opera-houses, including scenery and properties.

B. 8. \wedge ; B. 8. \vee

Club halls and society lodges (without scenery), Masonic, Odd Fellows, etc. (including regalia and paraphernalia).

B. 9. \wedge ; B. 9. \vee

Churches, chapels, synagogues, lecture and music halls (high class, no scenery), including church organs.

B. 10. $\circ \wedge$; B. 10. $\circ \vee$; B. 10. $+\wedge$; B. 10. $+\vee$

Schools, seminaries, academies, colleges, dormitories, convents, monasteries, polytechnic institutions, manual-training schools and observatories.

B. 11. $\circ \wedge$; B. 11. $\circ \vee$; B. 11. $+\wedge$; B. 11. $+\vee$

Libraries, literary, scientific, and art institutes and public museums, including contents and permanent public art collections.

B. 12.

Court-houses, with or without jails, state-houses and city or town halls.

B. 13. \wedge ; B. 13. \vee

Armories, drill halls, gymnasiums, shooting galleries, skating and curling rinks, riding academies, dance and assembly halls (in towns), temperance and salvation army halls and barracks, military stations and barracks.

B. 14. \wedge ; B. 14. \vee

Cycloramas, panoramas, dime museums and wax-work exhibits.

B. 15.

Fire-engine houses, fire-patrol and police stations (with or without lockups) and city market buildings.

B. 16. \wedge ; B. 16. \vee

Alms-houses and asylums (not insane), hospitals, infirmaries, sanitariums, orphans', soldiers', sailors' and old people's homes, deaf, dumb and blind asylums.

B. 17. \wedge ; B. 17. \vee

Insane asylums.

B. 18. \wedge ; B. 18. \vee

Jails, calaboozes, lockups and other public houses of incarceration, where no regular industries are maintained. (For penal industrial establishments, penitentiary workshops, etc., see Y. 4.)

B. 19. \wedge ; B. 19. \vee

Health and pleasure resort and camp-meeting cottages and dwellings.

B. 20.

Health and pleasure resort hotels, boarding-houses and club-houses, including lake shore and sea bath-houses, boat-houses, hunting and sporting, suburban and golf club-houses.

B. 21.

State and county fair and agricultural society buildings, grand stands, park pavilions, driving, baseball and football parks, and suburban houses of entertainment, casino and exposition side-shows.

B. 22.

Toboggan slides, merry-go-rounds, scenic and switch-back railways.

B. 23.

Exhibitions and exhibits (national, interstate or city), including pictures and art collections on temporary exhibition.

B. 24. \sqcap ; B. 24. \sqcup

C. FARMING COMMUNITY.

General farm property, where policy covers buildings, live-stock, machinery, implements, grain and produce in barns, granaries, cribs and stacks.

C. 1.

Live-stock not insured in connection with other farm property.

C. 2.

Grain or produce in barns, granaries, cribs or stacks, not insured in connection with other farm buildings.

C. 3.

Broomcorn in sheds or other farm buildings.

C. 4.

Tobacco barns on farms.

C. 5.

Hop-houses and contents on farms.

C. 6.

Growing crops.

C. 7.

Country schoolhouses.

C. 8.

Country churches.

C. 9.

Industrial

Mineral Kingdom

D. MINES, METALS AND ORES.

Foundries. (Iron, brass, bell, type, stove, car-wheel and hollow ware.)

D. 1. \wedge ; D. 1. \vee

Iron furnaces, rolling-mills, steel works, armor-plate, ordnance, anchor, chain, anvil, sheet, bar and hoop iron, tubing, metal pumps, heavy machinery, axe, axle and pick works.

D. 2. \wedge ; D. 2. \vee

Hardware, cutlery, edge-tool, arms, file, saw, skate, lock, mathematical and surgical instrument factories.

D. 3. \wedge ; D. 3. \vee

Nut, bolt and screw works, wire works, spike, nail and tack factories.

D. 4. \wedge ; D. 4. \vee

Pin factories, needle factories, steel-pen factories.

D. 5. \wedge ; D. 5. \vee

Blacksmiths (no woodwork), machine shops, locksmiths, gunsmiths, tinkers, bell-hangers, coppersmiths, plumbers and gas-fitters, engineer workshops.

D. 6. \wedge ; D. 6. \vee

Boiler works, metal cornice works, metal bed-spring, wire cable, wire fence and railing and barbed-wire works, metal tag and label, die and sinker works.

D. 7. \wedge ; D. 7. \vee

Gas fixture and chandelier, metal beds, metal lamps, scale and weight, iron safe factories.

D. 8. \wedge ; D. 8. \vee

Tinware and tin-can factories, galvanizing, enameling, japaning, tin, nickel and aluminum plating works, metal sign, granite-ware, metal button, metal toy and harness-trimming factories, metal mantel factories.

D. 9. \wedge ; D. 9. \vee

Watch, watchcase, metal clock, jewelry and metal penholder and pencil case factories.

D. 10. \wedge ; D. 10. \vee

Britannia silver and silver-plated ware factories.

D. 11.

Ore reduction works, copper, lead, tin, zinc, gold, silver, aluminum and other smelters, amalgamators and roasters, shot-towers.

D. 12. \wedge ; D. 12. \vee

Shaft and hoisting houses, stamping and quartz mills connected with other than coal mines.

D. 13.

White and red lead works.

D. 14.

Coal-mining risks, breakers, tipples, shaft and hoisting houses.

D. 15.

Straight metal workers, steam or hand power, not specifically named under class E.

D. 16. \wedge ; D. 16. \vee

E. EARTHS AND STONE.

Glass factories (plate and window).

E. 1.

Glass factories (hollow ware).

E. 2. \wedge ; E. 2. \vee

Tile, earthenware drain and sewer pipe and terra-cotta works, paving-brick works and brick kilns and yards.

E. 3. \wedge ; E. 3. \vee

Potteries.

E. 4.

Encaustic tile and vitrified brick works.

E. 5.

Cement, plaster, whiting and phosphate works, lime-kilns, dry-color works, pipe-clay, soapstone, talc and mica mills.

E. 6. \wedge ; E. 6. \vee

Marble, slate, granite and monumental works, marble mantel works, stone sawmills, stone-yards and quarry buildings.

E. 7. \wedge ; E. 7. \vee

F. EARTH OILS.

Petroleum and earth-oil refineries.

F. 1.

Oil wells and tanks and derricks connected therewith.

F. 2.

G. SUNDRIES—MINERAL KINGDOM.

Gas works.

G. 1.

Ice and distilled water factories (not insured with cold storage plants).

G. 2.

Salt blocks and works (not connected with sawmills).

G. 3.

Vegetable Kingdom

H. WOOD-WORKERS.

Saw, shingle and lath mills (including salt blocks insured therewith).

H. 1. \wedge ; H. 1. \vee

Planing-mills, sash, door, blind and wooden-box factories, steam-power carpenter and turning shops, spool, bobbin, shuttle, clothes-pin and wood-button factories.

H. 2. \wedge ; H. 2. \vee

Woodenware, tub, bucket, keg and barrel factories (steam-power cooperage), stave and heading and veneer factories.

H. 3. \wedge ; H. 3. \vee

Furniture and chair factories, picture frame and moulding works.

H. 4. \wedge ; H. 4. \vee

Piano, organ, melodeon and other steam-power wooden musical instrument factories, billiard-table and show-case factories.

H. 5. \wedge ; H. 5. \vee

Bamboo, cane, rattan and willow workers (hand or steam), including basket, chair, perambulator and baby-carriage factories.

H. 6. \wedge ; H. 6. \vee

Hub, spoke and wheel, pulley and block factories, wooden last and boot-tree factories, handle factories, broom-handle factories, bending works.

H. 7. \wedge ; H. 7. \vee

Hand-power carpenter, cabinet, undertaking, cooper and wood-turning shops, pattern makers, wooden musical instrument makers.

H. 8. \wedge ; H. 8. \vee

Dry-kilns (for wood) insured separately.

H. 9.

Straight wood-workers, steam or hand power, not specifically named above.

H. 10. \wedge ; H. 10. \vee

J. PAPER-WORKERS.

Paper-mills (straw, cardboard, wood-pulp and manila).

J. 1. \wedge ; J. 1. \vee

Paper-mills (white) working rags.

J. 2. \wedge ; J. 2. \vee

Paper-box, paper collar and cuff, paper-pattern, stationery, envelope and paper-bag factories.

J. 3. \wedge ; J. 3. \vee

Pulp-mills, cellulose and wood fiber, papier maché and leatherette factories, paper bucket and tub factories.

J. 4. \wedge ; J. 4. \vee

Printers, publishers, newspapers, lithographers, bookbinders, and blank-book manufacturers, playing-card and paper tag and label factories.

J. 5. $\square \wedge$; J. 5. $\square \vee$; J. 5. $\square \wedge$; J. 5. $\square \vee$

K. CEREALS.

Flour, grist and feed mills.

K. 1. $\circ \wedge$; K. 1. $\circ \vee$; K. 1. $+$ \wedge ; K. 1. $+$ \vee

Oatmeal, cornmeal, cerealine, hominy and rice mills.

K. 2. \wedge ; K. 2. \vee

Distilleries and rectifying establishments (wood alcohol or creosote), see Drugs and Chemicals, S. 1).

K. 3. \wedge ; K. 3. \vee

Grouped List

231

Breweries and malt-houses.

K. 4. \wedge ; K. 4. \vee

Kilns (malt, grain and oatmeal), not connected with breweries, mills or elevators.

K. 5. \wedge ; K. 5. \vee

Starch factories.

K. 6.

L. SACCHARINE.

Glucose and grape-sugar works (with or without starch-making).

L. 1.

Sugar-mills (beet and cane), including sugar-houses and purgatories on plantations.

L. 2.

Sugar refineries.

L. 3.

Candy manufactories (steam-power).

L. 4.

Confectioners (with candy-making by hand).

L. 5. \wedge ; L. 5. \vee

M. SUNDRIES—VEGETABLE KINGDOM.

Coffee, spice, cocoa, chocolate, chicory and mustard mills.

M. 1.

Bakeries and cracker factories (steam-power).

M. 2.

Bakeries (hand-power), with or without candy-making.

M. 3. \wedge ; M. 3. \vee

Linseed, cottonseed and other vegetable oil mills, oil-cake mills, also oil tanks and contents connected or exposed thereby.

M. 4. \wedge ; M. 4. \vee

Fruit dryers and evaporators.

M. 5.

Vinegar works, cider-mills and wineries.

M. 6.

Pickle and preserve factories.

M. 7.

Tobacco stemmeries, curing, sizing and rehandling houses.

M. 8. \wedge ; M. 8. \vee

Tobacco and cigar factories.

M. 9. \wedge ; M. 9. \vee

Hay-presses (steam and horse power).

M. 10.

Cotton-gins, cotton-waste mills, batting, wadding and lint factories.

M. 11.

Turpentine refineries and rosin distilleries.

M. 12.

India-rubber and gutta-percha works, mackintosh, rubber-clothing and rubber-toy factories, vulcanite works.

M. 13. \wedge ; M. 13. \vee

Horticultural buildings and greenhouses not connected with, dwellings.

M. 14.

Animal Kingdom

N. KILLING, CURING, PACKING AND PREPARING.

Slaughter-houses and abattoirs not connected with packing plants.

N. 1. \wedge ; N. 1. \vee

Pork and beef packing establishments, including rendering, smoking and slaughtering, sausage factories, bacon and ham curing establishments.

N. 2. \wedge ; N. 2. \vee

Meat-shops with rendering and sausage-making.

N. 3. \wedge ; N. 3. \vee

Smoke-houses not connected with packing plants.

N. 4. \wedge ; N. 4. \vee

Soap and candle factories, lard-oil refineries, axle-grease, grease and lubricating works, butterine and oleomargarine factories.

N. 5. \wedge ; N. 5. \vee

O. HIDE PRODUCTS.

Tanneries, currier shops, skin-mills, morocco, vellum and parchment makers.

O. 1. \wedge ; O. 1. \vee

Boot, shoe, saddlery, harness, leather hose and belting, counter heel and stiffening factories.

O. 2. \wedge ; O. 2. \vee

Glove factories (kid and leather), pocketbook and hat-band factories.

O. 3.

Shoemakers, harness and saddlery shops. (Small repair shops in connection with retail stocks class as Preferred, see A. 2.)

O. 4. \wedge ; O. 4. \vee

Hat factories (fur, felt, wool and silk).

O. 5.

Wool-pulling and wool-washing.

O. 6.

Patent, glazed and varnished leather factories and leather japanneries.

O. 7.

P. SUNDRIES—ANIMAL KINGDOM.

Glue works, curled hair and bristle, bone-grinding and bone-black establishments, fertilizing works (animal and fish products), not connected with packing establishments.

P. 1.

Hair-mattress and hair-upholstering works (no woodwork done).

P. 2.

Billiard-ball factories and button works (ivory, bone, horn and pearl), comb-makers and other workers in ivory, bone and horn.

P. 3.

Poultry and egg packing and preserving establishments.

P. 4.

Fish-packing establishments, salting, curing, smoking and packing (not canneries).

P. 5.

Creameries and cheese factories.

P. 6.

Condensed milk and sugar of milk works.

P. 7.

Miscellaneous Industrial

Q. WOOD AND METAL.

Agricultural implement and plow works.

Q. 1. \wedge ; Q. 1. \vee

Carriage, wagon and car works and sewing-machine factories.

Q. 2. \wedge ; Q. 2. \vee

Washing, wringing machines and washboard factories.

Q. 3.

Spade, shovel and wheelbarrow factories.

Q. 4.

All combined wood and metal workers not mentioned above (steam-power).

Q. 5. \wedge ; Q. 5. \vee

Blacksmith and wagon shops, wheelwrights and all combined wood and metal workers not mentioned above (hand-power).

Q. 6. \wedge ; Q. 6. \vee

R. TEXTILE.

Shoddy, mungo and flock mills.

R. 1.

Woolen-mills, carpet, rug, shawl, blanket and worsted mills, bunting factories and felt works.

R. 2. \wedge ; R. 2. \vee

Woolen and cotton mills combined, spinning and knitting mills, hosiery works, knit underwear factories, webbing and elastic-web mills, braid-mills, chenille-mills, mohair-mills, coverlet or bed-spread factories.

R. 3. \wedge ; R. 3. \vee

Cotton-mills.

R. 4. \wedge ; R. 4. \vee

Linen, flax, and thread mills and lace factories.

R. 5.

Silk and plush mills.

R. 6.

Jute and bagging factories, rope, twine, and cordage factories, and rope-walks.

R. 7.

Bag factories (not paper bags).

R. 8.

Clothing factories, shirt factories, overall factories, banner, flag, and regalia factories (merchant tailors class as A. 2).

R. 9. \wedge ; R. 9. \vee

Tent, awning, tarpaulin, and sail makers.

R. 10.

Straw hat and bonnet and straw-goods factories.

R. 11.

S. DRUG, CHEMICAL, AND PAINT WORKS.

Chemical works, manufacturing chemists and druggists and chemical laboratories, including sulphur refineries, wood alcohol (creosote) distilleries, acid, alkali and acetate works, acetic, nitric and sulphuric acid works, ammonia and sweet spirits of nitre works, bleaching, baking, washing, and alum powders, soda-ash, litharge, copperas, borax, cream of tartar, and effervescing-salt works.

S. 1. \wedge ; S. 1. \vee

Patent and proprietary medicine, perfumery, fluid extract, and cosmetic factories.

S. 2.

Drug-mills, dye extracts, dyestuff, and writing-ink factories.

S. 3.

Paint, varnish, lacquer factories, oil-color works, and printing-ink factories, blacking factories (shoe and stove polish).

S. 4.

T. ELECTRIC.

Electric light and power plants (not railway).

T. 1. \wedge ; T. 1. \vee

Electric-car barns and contents and power-houses connected therewith, including all street-railway property where electricity is used as motive power.

T. 2. \wedge ; 2. \vee

Telegraph offices and telephone exchanges, switchboards and telephones in use.

T. 3.

Electroplating and electrotyping establishments.

T. 4.

U. TRANSPORTATION.

Railroad property (embracing all policies, general or specific, covering railroad risks).

U. 1.

Street-railway property (not electric).

U. 2.

Water craft, steamers, tugs, barges, yachts, ferry-boats, floating derricks and dredges, and shipping in port.

U. 3.

Ship-building yards, and boats or ships building or under repair, floating and dry docks.

U. 4.

Express offices and contents.

U. 5.

Wharves, piers, bulkheads.

U. 6.

Bridges, wood.

U. 7.

Bridges, iron.

U. 8.

V. UNCLASSED INDUSTRIAL.

Bicycle, tricycle, and auto-motor vehicle factories.

V. 1.

Bleacheries, print and dye works, calico-printers, calenderers and finishers.

V. 2.

Broom and brush factories.

V. 3.

Canning factories (vegetable, fish, oyster, and animal products) and oyster packing-houses.

V. 4. \wedge ; V. 4. \vee

Celluloid and zylonite factories.

V. 5.

Cleaning, renovating, and dyeing establishments (clothing, carpets, feathers, etc.).

V. 6.

Laundries (steam).

V. 7.

Coffin and burial-case factories.

V. 8.

Mattress factories, excelsior works, horse-collar factories, and upholstering works (except hair).

V. 9.

Oilcloth, linoleum, and cork carpet factories.

V. 10.

Photograph galleries.

V. 11. Δ ; V. 11. ∇

Shirt, collar, cuff, neckwear, dress-trimmings, cloth-caps, umbrella, parasol, suspender, and corset factories.

V. 12.

Mineral, soda, and aerated water factories, manufactured cider works, pop works, bottling works, beer-bottling establishments.

V. 13.

Trunk factories, carpet-bag, valise, hat-box, satchel, pocket-book, whip factories.

V. 14.

Opera and marine glass, eyeglass, thermometer, astronomical, nautical, and optical instrument makers, electrical apparatus factories (not dynamo factories).

V. 15.

Carbon works, lamp-black works, carbon-point works.

V. 16.

Cartridge and fixed ammunition factories

V. 17.

City pumping stations and water-works and power engine-houses connected with manufacturing or other plants and insured separately.

V. 18.

Bath-houses (city), Turkish, Russian, electric, and swimming. (Ordinary class as Y. 5.)

V. 19.

Omnium Gatherum

W. STEEL FIREPROOF BUILDINGS—MODERN CONSTRUCTION.

Office buildings and contents, with or without small stocks on ground floor.

W. 1.

Mercantile buildings and contents, with or without office occupancy above.

W. 2.

Hotels, theaters, and opera-houses and contents, with or without shops on ground floor.

W. 3.

Manufacturing buildings and contents.

W. 4.

X. SPRINKLERED RISKS.

Mercantile and storage risks and contents.

X. 1. $\square \circ \wedge$; X. 1. $\square \circ \vee$; X. 1. $\square + \wedge$; X. 1. $\square + \vee$

X. 1. $\square \circ \wedge$; X. 1. $\square \circ \vee$; X. 1. $\square + \wedge$; X. 1. $\square + \vee$

Manufacturing risks, buildings and contents.

X. 2. \wedge ; X. 2. \vee

Cereal-mills of all kinds, elevators and contents and other risks with concealed spaces that cannot be completely sprinklered.

X. 3. \wedge ; X. 3. \vee

Y. RESIDUUM.

BUILDERS' RISKS.—Buildings in course of construction or repair. (When insured, for owner with permit for occupancy when completed, should be classed according to occupancy.)

Y. 1. \wedge ; Y. 1. \vee

Leases, rents, use, occupancy, profits and commissions.

Y. 2. \wedge ; Y. 2. \vee

Auction-houses, including salvage and bankrupt stocks in process of closure.

Y. 3. \wedge ; Y. 3. \vee

Penal industrial institutions, including penitentiaries, work-houses, and reformatory institutions where regular industries are maintained, also workshops and contents connected therewith.

Y. 4.

MINOR INDUSTRIES, embracing artisans, architects, and artists' studios, assayers, barber-shops, bath-houses (ordinary), bicycle repair-shops, carvers and gilders, china decorating and firing, cobblers, costumers, dentists, dressmakers' parlors, engravers, florists, furniture and upholstery repair-shops, glass-grinders, gold-beaters, gold and silver-smiths, hair-dressing, jewelry repairing, lapidaries, laundries (hand-power), milliners' parlors, model-makers, opticians, painters and decorators, paper-hangers, rubber-stamp makers, shoemakers, stencil-makers, tailors, taxidermists, typewriter repair-shops, undertakers' parlors (no stock), upholstering shops and furniture repairs, watchmakers (repair shops), wigmakers, woodcarvers.

Y. 5. $\square \wedge$; Y. 5. $\square \vee$; Y. 5. $\square \wedge$; Y. 5. $\square \vee$

CONGLOMERATE INDUSTRIES, embracing risks where two or more separate classes of manufactures are carried on in communicating or exposing buildings, as say a combined elevator and saw-mill, salt-block and alkali works, woolen-mill and flouring-mill; also omnibus manufacturing buildings and contents in cities where a variety of small miscellaneous industries are carried on under one roof, deriving power from one central source or furnishing their own power. (This does not include buildings occupied by hand-power industries, for which see Minor Industries, Y. 5, nor *salt blocks insured with sawmills*, for which see H. 1.)

Y. 6. \wedge ; Y. 6. \vee

UNCOMMON INDUSTRIES, embracing the following and all other industries not conglomerate and not elsewhere specifically mentioned, excepting "straight metal-workers" (see D. 16), "straight woodworkers" (see H. 10.), and combined "wood and metal workers" (see Q. 5. and Q. 6.).

Y. 7. \wedge ; Y. 7. \vee

Artificial-feather factories.

Artificial-flower factories.
Artificial-limb factories.
Asbestos works.
Asphalt-paper works.
Asphalt-paving works.
Barbers' supplies factories.
Bed comforter and pillow works (feather, down, or cotton).
Cable (marine) works.
Capsule factories.
Carbide factories.
Check-rower factories.
Chewing-gum factories.
Cigarette factories.
Clay tobacco-pipe factories.
Cordial factories.
Corundum works.
Cosmoline works.
Crushers (stone and cinder).
Dress-trimming factories.
Emery-paper factories.
Emery-wheel factories.
Fishing-tackle factories.
Fish-net factories.
Fly-paper factories.
Garbage furnaces.
Glycerine factories.
Guano works.
Gum (mucilage) factories.
Hames factories.
Hog-ringer factories.
Kindling-wood factories.
Lead-pencil factories.
Licorice factories.
Logwood grinders.
Looking-glass works.
Macaroni factories.
Marine-cable works.
Match factories.

Mineral-wool works.
 Mucilage works.
 Paper-hangings factories.
 Pencil (wood) factories.
 Pepsin factories.
 Pipe (tobacco) factories.
 Razor-strop factories.
 Refuse destructors.
 Roofing works (asphalt and pitch).
 Sand-paper factories.
 Sealing-wax factories.
 Smokers' articles factories.
 Snuff factories.
 Stearine factories.
 Tar-paper factories.
 Tobacco-pipe factories (wood, cob, meerschaum, and clay).
 Vaseline factories.
 Vegetable-ivory works.
 Vermicelli factories.
 Wallpaper factories.
 Window-shade factories.





1918
1918

